SOCIAL AND LEARNER-SPECIFIC FACTORS IN THE ACQUISITION OF NATIVE-LIKE PHONETIC CONTRASTS BY STUDY ABROAD STUDENTS IN PARIS, FRANCE

BY

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DISSERTATION

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ABSTRACT

This dissertation explores the influence of the social and learner-specific aspects of the study abroad experience on learners' developing nativelike phonology, overall proficiency, and motivation for second language learning. Its guiding research questions draw on theory and methodologies of both sociophonetics and second language acquisition. This research examines to what extent the attitudes and motivations of American university students studying in Paris influence their acquisition of the previously documented counter-clockwise rotation of nasal vowels in Northern Metropolitan French. Participants in this study were twelve students from an American university who participated in a study abroad program in Paris for one semester.

The study employs a battery of qualitative and quantitative instruments (in a mixed methods design) to monitor students' attitudes and motivations, French proficiency, ideologies about the host community, contact with the French language in the host community, and locally-specific nasal vowel perception. These instruments included a cloze test and an elicited imitation test for proficiency, a battery of motivational and attitudinal questionnaires, questionnaires about participants' language backgrounds and contact with the target language, semi-structured individual and focus group interviews, and a nasal vowel perception experiment that was compared to the results of a native speaker control group. Results show that most participants were more likely to improve in their locally-specific nasal vowel perception if they demonstrated positive attitudes about their local host community, had relatively high proficiency levels, lived with a well-matched host family, spent more time interacting and reading in French, and spent less time interacting in English during the study abroad program. These results suggest that dialect-specific phonological acquisition may be influenced by a learner's motivation to identify with the host community.

DEDICATION

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CHAPTER 1: INTRODUCTION

The number of American students studying abroad has more than tripled since the 1990's, with over 304,000 students participating in the 2013-2014 school year. Those traveling overseas to develop majors in foreign languages or international studies accounted for only 7.8% of participants in that academic year, with many more studying science, technology, engineering, mathematics, business, or social sciences. For those students going abroad, the most common destinations are the United Kingdom, Italy, Spain, and France. The vast majority of students remain abroad for less than a year, with most programs lasting eight weeks or fewer (Institute of International Education, 2015).

The study abroad phenomenon remains subject to stereotypes in the tradition of the Grand Tour: wealthy young (female) adults travel abroad for general cultural exposure and entertainment. Study abroad researcher Celeste Kinginger (2010) stated, for instance, that "Study abroad, according to the dominant discourse, is most appropriate as a decorative add-on to the education of elite women" (p. 219). Programs have been rightly criticized for their mixed success in pushing their students to either acquire the local language or interact meaningfully with their host communities. The American model of study abroad, in particular, sends students overseas in what become cohesive groups, further enabling participants to become insulated from the cultures surrounding them (Kinginger, 2010). It is therefore crucial for the educational success of these programs that researchers and program administrators develop a fuller understanding of students' relationships to their host communities and target languages.

Most study abroad research on language acquisition has focused on general proficiency for the purpose of program evaluations, with less attention being paid to the social factors influencing language acquisition. Researchers come away with an incomplete

picture of study abroad students' target language exposure when the focus is only on what happens in the classroom without also asking about whom the students interact with in the host community.

Language education professionals are generally aware of the interconnectedness of language skills and intercultural skills. As the president of the American Council on the Teaching of Foreign Languages (ACTFL), Jacque Van Houten, said in her annual message in 2015, language programs need to construct their program requirements around an awareness of the ways in which their students will be expected to interact with their target languages and the communities that speak them. She mentioned that study abroad, internships, and service-learning were useful for this goal, but that they "are only as good as their alignment to learning goals" (2015, p. 537). The present research intended to illuminate some of the linguistic and intercultural learning already occurring during study abroad, with the eventual aim of more closely aligning study abroad programs to linguistic and intercultural learning objectives.

This dissertation followed a group of twelve study abroad students from the University of Illinois at Urbana-Champaign during one semester in Paris, observing their linguistic progress and inquiring about their interactions with Parisians. It intends to add to the knowledge of the interface between cultural alignment and phonetic learning, establishing whether there is indeed a link between L2 learners' identification with a target language community and their capacity to hear locally-relevant, fine-grained pronunciation patterns typical to that community.

By combining the approaches of multiple sub-fields of sociolinguistics and second language acquisition, the present dissertation aims to contribute a more holistic understanding of some of the many facets of language learning and language use in the living, social world. As McAll (2013) described it:

> "Given social constructivism, the disciplinary frontier no longer holds. The study of language brings us into the workshop of the social world... Critical social constructivism requires the abandoning of the safe havens of social thought that see human beings as mere bearers of cultures, end-users of linguistic codes, and functioning or nonfunctioning parts of greater wholes that have their own systemic logic. It requires the crossing of frontiers, the creation of spaces for dialogue, and the pooling of disciplinary knowledge." (McAll, 2013, p. 63)

This multifaceted, multidisciplinary inquiry into possible links between participant identity, motivation, and the acquisition of local dialectal features in a naturalistic study abroad setting can thus shed more light on how the language learning process works in a social context, outside the strict control of a laboratory. The knowledge gained from this thesis can, therefore, be used to improve the effectiveness of study abroad and other language education programs.

CHAPTER 2: LITERATURE REVIEW

Theoretical Framework

The present study relies on the framework of long-term accommodation implemented through repeated instances of interactive alignment. Interactive alignment is defined as a process of joint action between interlocutors communicating via spoken language and aiming at coordinating or *aligning* their mental representations (Garrod & Pickering, 2009; Pickering & Garrod, 2004). This process, Garrod and Pickering argue, is typically achieved in dialogs where "joint linguistic activity at lower levels [are] concerned with linguistic decisions (e.g., choice of words) and nonlinguistic processes (e.g., alignment of posture or speech rate and is implemented through "imitation and entrainment [between interlocutors] during interactive communication" (2009, p. 292). Interactive alignment, thus, represents a form of active learning and can lead to the long-term accommodation of interlocutors' speech patterns. As opposed to *accommodation* that, in sociolinguistics, is used to typically refer to long-term alterations in communicative and linguistic behavior, *interactive alignment* refers to the results of interpersonal contact in speech and language use that occur during repeated interactions between speakers. Repeated interactive alignment can eventually lead to long-term accommodation to others' speech and language use. Some researchers describe interactive alignment as an automatic process, typically applying the concept to the emulation of interlocutors' speech patterns, often referring to it as phonetic convergence, a result of psycholinguistic priming (Pardo, 2006; Pickering & Garrod, 2004). Pickering and Garrod (2004), however, do remark that speakers may be able to choose the extent to which they wish to align their linguistic features to those of an interlocutor, as in the case of a conversation with a computer (p. 188). It has also been shown that interactive alignment can

occur at any level of the linguistic structure, and can include any kind of a linguistic feature, from discursive to syntactic to lexical to sub-phonemic.

Pardo (2006) was among the first to note that social factors seem to affect phonetic convergence. In her study, participants were placed in pairs and asked to complete a map task where one person gave directions shown on a map and the other traced the route without seeing the direction-giver's map. The names of landmarks on the map were used as target words, and participants were recorded saying these words before, during, and after the map task. Recordings of the participants saying the target words were then played for raters in an ABX format, where the raters were asked to identify which tokens sounded more similar to each other. Raters detected a significant increase in similarity between participants' pronunciation over the course of the interactive task and also after the task had ended, which shows that the convergent effect was persistent beyond immediate mimicry of a partner's pronunciation (Pardo, 2006).

Equally interesting was that participants' roles in the map task and their sexes were significant factors in their phonetic convergence: "Overall, male talkers converged more than females, and givers converged more than receivers. In female pairs, givers of directions exhibited convergence to receivers of directions, but receivers did not converge to givers. In male pairs, the opposite pattern was found- male receivers converged to male givers more than the reverse" (Pardo, 2006, p. 2388). Although this was a human-rated rather than acoustic phonetic study, it lends support to the idea that phonetic convergence does occur as a product of interactive alignment between participants who play a specific social role in an interaction. One must, therefore, hypothesize that convergence on fine-grained phonetic differences in speech might be influenced by extralinguistic or social-interactional factors.

Another recent study by Luthi and Vorwerg (2014) on syntactic priming in speakers of Bernese German found that participants were more likely to repeat primed structures

within their own variety of dialectal German and within a variety of similar status (Valais German) than they were to repeat primed structures from the prestige variety of Standard German. Although syntactic rather than phonetic, this study shows that sociolinguistic categories such as dialect can facilitate or inhibit what is normally thought of as an automatic priming process. In other words, interactive alignment that produces linguistic convergence appears to be a social, rather than purely *mechanistic*, behavior.

In Mendoza-Denton's (2008) book, *Homegirls*, the author notes that allophonic variation in the speech of Latina teenagers was one of many signs of gang affiliation and group membership. One participant abruptly altered her pronunciation when she was "jumped in" to a gang with strong Spanish-speaking identity features:

> "Her previously fricative [θ] had fortitioned and dentalized into a [t̪] and the following vowel was now a high, tense [i]. Both of these features were associated with the defiant girls forming the core gang group who, though native speakers of English and perfectly able to produce the fricative /θ/ and lax /I/, chose to draw upon the symbolic repertoire of Spanish phonology as part of their linguistic production." (p. 208)

Following this observation, Mendoza-Denton performed an acoustic analysis of the girls' realization of the phoneme /I/. She used interview recordings from twelve Latina girls representing six distinct social groups she had previously identified. The strongest predictor of the realization of the /I/ vowel class as the raised vowel [i] was when it was followed by the consonant [ŋ]. Group membership was the second strongest predictor, and the strongest social predictor for the raising of /I/ to [i], as well as its lowering to [ɛ]. Mendoza-Denton interprets this phonological variable as one of many practices that these girls used to index group affiliation, even though they had similar socioeconomic, linguistic, and geographical

backgrounds. Thus, affective interpersonal alignment with members of a group, even independent of native speaker status, can play a role in sociophonetic variation.

The concepts of interactive alignment during interaction and accommodation as long-term changes in linguistic practices have also recently emerged in research in second language acquisition. The use of repeated linguistic patterns to prompt interactive alignment in pronunciation has been proposed as a possible teaching method for second language learners (Trofimovich, 2013). However, it is not yet known whether learners, like native speakers in the studies discussed above, retain the phonological changes beyond the interaction itself. Trofimovich (2013) proposes that interactive linguistic alignment may happen alongside sociocultural alignment, i.e., ideological closeness to the target culture and desire to coordinate communicative practices with native speakers from this culture. In other words, learners may speak more like target language speakers if they share social elements with them or strongly identify with the group they represent. As Trofimovich proposes, "It is possible to imagine, then, that interlocutors can also align (or fail to do so) at the level of social factors, such as attitudes, beliefs, and identity, and that these could influence the nature of interaction and the quality of language produced" (2013, p. 8).

The present study intended to explore this possibility in a realistic study abroad rather than laboratory setting by evaluating the effects of the *sociocultural alignment* of second-language learners French with target language speakers of Parisian French.

Goals and Variables

The overarching goal of this study was to examine the acquisition or non-acquisition of authentic local Parisian nasal vowel perception. Following the literature, three independent variables were considered as possible factors in this acquisition. These were: study abroad participants' proficiency in French, their identities and motivations as L2 speakers of French, and their attitudes toward and amount of time spent with the Paris host community and in

various contexts. The impact of each of these factors was considered separately (in subchapters of Chapter 4) and then merged to look for potential interactions between them (as a separate subchapter of Chapter 4).

Social Factors

Sociolinguistic Status of Paris

Of the approximately 64 million people living in France, over 12 million live in Île-de-France, the region which includes Paris (INSEE, 2017). In addition to being the seat of the French national government and a number of prominent international organizations, the city of Paris also houses the Institut de France, home of the Académie Française. The mission of the Académie is to prescribe rules for the French language so that it remains pure (codification) and can be used for widespread technical purposes (elaboration) (Académie française, 2017). The French spoken by the Parisian upper classes has long been considered the most prestigious variety, the "French of reference," which is similar but not presently identical to the standard prescribed by the Academy (Morin, 2000).

The variety of French used by the royal court in and around Paris was chosen as the basis for the standard, beginning under Louis XIV in the 17th century. Speaking (or at least writing) this standard was a prerequisite for participation in public administration. After the French Revolution and the downfall of the monarchy, Parisian elites (defined in a variety of ways by different scholars) provided the prototype for what was considered *bon usage* (Armstrong & Pooley, 2010; Lodge, 1993), and this standard became symbolic of French national identity. Paris is, without question, the political and linguistic center of the French-speaking world.

The variety of French spoken in and around Paris, north of the Loire Valley, is often referred to as Northern Metropolitan French (NMF). This variety has been shown to have undergone supralocal leveling, where similar features emerge across a region that previously

contained more variation, particularly in its vowel system and its treatment of schwas. Even native speakers have a hard time detecting regional variation in the speech of people within this extended area around Paris (Armstrong & Boughton, 2009). Therefore, even if the study abroad students in this study interacted with people who were born and raised in the region surrounding Paris, rather than exclusively with lifelong Parisians, it is likely that the language input they received from these sources would have similar linguistic features.

Motivation and Attitudes toward Parisians

Attitudes and motivation are related but not identical. Attitudes are the emotional aspects to learning a language, such as whether students enjoy their classes or believe that speakers of the target language are friendly. Motivation is the rationale and willingness that students have to put in the effort and time necessary to improve their acquisition of a foreign language. In early work, motivation was generally described in two categories. The first motivational factor under examination in this earlier work was broadly labeled as *instrumental motivation*, where learners sought to further their language acquisition for the objective of using it for specific activities, such as to get a better grade or use the language in a future career. The motivational factor described by Gardner (1985a) that is most relevant to the current study was referred to as *integrative motivation*. Gardner described this as "a goal to learn a second language because of a favourable interest in the other language community" (p. 54).

A prominent and foundational instrument for the study L2 motivation is the Attitude/Motivation Test Battery by Gardner (1985a, 1985b, 2005). At the time of Gardner's (1985a) book, it was known that language learners' attitudes toward learning the language in general did not always correlate with language attainment in the same way as attitudes toward specific host communities. Gardner states:

> "…[A]ttitude measures do differ in their degree of relationship with achievement in the second language, suggesting that some indices are more relevant than others. In general, for example, studies involving attitudes toward learning the language generally obtain higher relationships with achievement than studies of attitudes toward the second language community, and the patterns appear more consistent." (p. 41)

With the growth of globalized language learning, it is not always evident which L2 community is the target of this integrative motivation (Dörnyei, 2009; Ushioda & Dörnyei, 2009). Furthermore, the paradigm of disparate motivational factors (i.e., favorable opinions of target language speakers, desire to work in a career using the target language) has largely been replaced by the conceptualization of motivation as a function of the learner's idealized, imagined future selves.

Comparatively, the ideal L2 self is a collection of attributes that a learner would like to attain as a result of the language learning process. The ideal L2 self has been found to readily include the categories of integrativeness (desire to belong to an L2 community), attitudes toward members of the L2 community, and instrumentality (pragmatic use of the L2) (Dörnyei, 2009). Dörnyei (2009) proposes three components of the L2 Motivational Self System:

1. *The Ideal L2 Self* is the L2-speaking person whom a learner wants to become.
2. *The Ought-to L2 Self* is the attributes that a learner believes he/she needs to have in order to meet external expectations or avoid negative outcomes.
3. *L2 Learning Experience* is the social and academic environment in which the learning happens.

Independent investigations have supported this model, finding that the ideal L2 selves model strongly correlated with the motivational categories that were used in Gardner's AMTB (Dörnyei, 2009).

Dörnyei's approach views the ideal L2 self as an imagined being, and a reference for the learner who is motivated to progress in the target language to narrow the gap between his or her present self and the ideal future self as an L2 speaker. Thus, while being at the same time highly personal and idiosyncratic, the ideal L2 self can be thought of as a desired social identity (MacIntyre, Mackinnon, & Clément, 2009).

MacIntyre et al. (2009) developed a scale to further operationalize Dörnyei's theoretical construct of the ideal L2 self for use in SLA research, which they then tested with Canadian high school students who were learning French as a second language. MacIntyre and his team regrouped items from Gardner's Attitude/Motivation Test Battery (1985a) that they believed to be reflective of Dörnyei's categories of ideal L2 selves (Csízer & Dörnyei, 2005). Under the umbrella category of "Integrativeness," they grouped AMTB items that sought to address integrative orientation, interest in foreign languages, and attitudes toward speakers of the target language (French Canadians in the case of this study). Under "Motivation," they included items from the AMTB that tested motivational intensity, desire to learn French, and attitudes toward learning French. Statements on the questionnaire elicited either binary or 5-point Likert responses (for example, "I understand French Canadians' views," or "I enjoy speaking French"). The questionnaire also included a scale of possible selves from Dörnyei for each question from Gardner's AMTB, asking participants to note whether each statement described them now, in the future, in the likely future, in the desired future, and whether they frequently thought about this motivating factor.

By including Gardner's AMTB questions with Dörnyei's scale of possible selves, MacIntyre et al. (2009) found that the responses to Gardner's measurements of

integrativeness and motivation correlated strongly with Dörnyei's possible selves scale; that is to say, students who wanted to belong to the target language community also envisioned themselves doing so in the future. The authors note that even though motivations and ideal L2 selves appear to strongly correlate, researchers can obtain a richer perspective on students' attitudes and motivation than could be obtained by the AMTB alone if they collect information about which factors currently motivate students as well as what students wish for themselves as L2 speakers in the future (MacIntyre et al., 2009). The present study explored motivational factors in this way.

MacIntyre et al. (2009) also grouped respondents into three categories based on their response patterns on the Possible Selves questionnaire, labeling these categories as "aspects of self." These were determined by the proportion of *yes* or *no* responses for prompts in the columns, "describes me now" and "describes possible future." Those who answered mainly *yes* for both columns were labeled as having *developing aspects of self,* since they were currently working toward something they foresaw themselves doing in the future. Those who answered mainly *no* in the "describes me now" column and *yes* in the "describes me in the future" were labeled as having *expanding future aspects of self*, since they had not yet obtained something they foresaw themselves doing in the future and were expanding their future selves. Participants who answered mainly *no* in both columns were labeled as believing the items to be *extraneous to self,* since they neither possessed the attributes nor envisioned them for their futures. The resulting clusters were then used for analysis to find correlations between types of motivation.

The present study hypothesized that those study abroad students whose ideal L2 selves were affectively aligned to members of the local target language community (such as host families, program staff, or friends) would be more likely to acquire local dialectal

features than those whose ideal L2 selves were less connected in the local target language community.

The concepts of motivation to belong to the host community and students' acquisition of the target language have been applied in various contexts in study abroad. For instance, Isabelli-Garcia (2006) showed that motivation and community involvement can fluctuate throughout the study abroad language learning process. In her study, American students in Argentina made weekly diary entries which she operationalized for further analysis by dividing students' comments into categories such as comparisons between home and host cultures where students made judgments about one being better or worse, their feelings about events that happened that week, and broad descriptions of people from Argentina as a group. Based on trends in the students' diary entries, Isabelli-Garcia (2006) designated the students as having high or low social attitudes toward members of the host culture. By having students carefully track their involvement in social networks, she found that attitude maintained toward the host culture influenced students' motivation to participate in the local community, which in turn affected their motivation to learn the target language and led to measurable impacts on language acquisition. Finally, students who had the more complex social networks with native speakers displayed the highest motivation to learn the target language and greater gains in proficiency. Similarly, the present study elicited information from participants about their interlocutors in Paris in an attempt to learn more about their target language use and motivation to form social bonds with native speakers.

The Ideal L2 Self and Figures of Personhood

As explained above, in the present study, the framework of motivation, which is linked to the concept of ideal L2 selves, guides the interpretation of participants' discourse about their host community and their perceived place within that community. More specifically, it was deemed necessary to find out what study abroad student participants

included in the present study thought and felt about Parisians. One reason why is that not only can students' opinions of and experiences with this host community inform the design of future study abroad programming, but these opinions can also serve as a reference for the social types the students encountered. A positive outlook toward members of their Parisian host community could also serve as a proxy for the desirability of potential membership in that host community.

One useful perspective to operationalize the self is called a *figure of personhood*, which comes from linguistic anthropology. A *figure of personhood* is an abstract concept that can be emergent in a discourse and can be recognized by a given community as a prototypical *type* of person. A *figure of personhood* can also be constructed indirectly by describing ways in which a given *figure of personhood* contrasts with another social type (Agha, 2005), as when a student might say that Parisians are different from Americans. In the context of the study abroad setting studied in this work, a complimentary figure of personhood for the typical Parisian could be interpreted as a positive view of the host community and as a potential, desirable future *self*' for the learner of French. In contrast, a negative view of the imagined, prototypical Parisian could be interpreted as an undesirable future *self* for the study abroad learner, implying a lower level of motivation to integrate in the host community and become like a Parisian.

The concept of *figures of personhood* has been connected to language use in previous work in sociolinguistics and other domains of the social sciences. For example, Carr (2010) conducted research with women recovering from substance abuse, and found that patients in the program were encouraged to speak very clearly about their internal feelings and use specific jargon from the recovery program in order to embody the *figure of personhood* of the recovering addict. Those who did not comply with these linguistic constraints were not considered to have recovered sufficiently from their addictions. Wortham (2001) found

implied parallels between previous and past events in a news broadcast that positioned a politician as a potential criminal. Mendoza-Denton (2008) used linguistic and extralinguistic information to loosely define the *figures of personhood* of different Latina gang members in California in the 1990's, noting that teenaged girls from similar upbringings signaled membership in either the Sureños or the Norteños gangs through clothing and hair styles.

Similarly, Koven (2015) showed that the *figures of personhood* of the elderly Portuguese relative and the young, hip French adolescent were constructed in the storytelling discourse of second-generation Portuguese immigrant women living in France. Koven's participants evoked both national and temporal identities, also called "chronotypes," in their exaggerated recounting of the behavior of older relatives back in Portugal. It became evident that the *figure of personhood* of the prototypical old-fashioned Portuguese woman was an enregistered, recognizable character among this young migrant community, in contrast to the *figure of personhood* of the modern French woman with which the participants tended to align. Bilingual language use was also evident in that though the surrounding conversations took place mainly in French, the chronotype of the elderly Portuguese relative was typically evoked in Portuguese.

Based on the way in which personhood has shown to be manifested in discourses in previous research, it was predicted that, over the course of their interviews, study abroad participants in this study would construct and call upon prototypical *figures of personhood* for Parisians. Their conceptions of Parisians may or may not differ from their conceptions of French people in general. Furthermore, it was predicted that the attributes of these figures of personhood might affect students' desire to interact with Parisians.

It is crucial to note that, at the time these students were participating in study abroad in Paris (and at the time of this writing), there was considerable debate in French society about what it meant to be French and Parisian. This debate had been exacerbated and brought

to public attention following a series of traumatic events. Just shy of a decade prior to the program in question, there had been over three weeks of rioting mainly centered in the *banlieues* (low-income suburbs) of Paris, following the deaths of two minority, Muslim teenagers who were electrocuted while running from White police officers. The officers involved were acquitted while this study's participants were in Paris. In the month prior to the beginning of the study abroad program, while some participants were already on their way to Europe, two French citizens of Algerian descent and a French citizen of Malian descent killed a total of 17 people in and around Paris. The attackers notably targeted a Kosher grocery store and the offices of the satirical newspaper Charlie Hebdo, which had published unflattering depictions of Mohammed and of Islam.

Both attackers and victims were from regions in and around Paris, highlighting a small part of the diversity of experiences in the city (Chrisafis, 2015). The Prime Minister at the time described the attacks as highlighting a "territorial, social, and ethnic apartheid" in France (Le Monde, 2015). The statistical extent of these social inequalities is poorly understood. As of this writing, it remains forbidden for the French government to collect explicit ethnic or religious data on its citizens, as it is seen as divisive or even dangerous (recalling the use of such a database during World War II), but researchers who extrapolate such statistics based on immigrants' countries of origin find evidence of massive inequality (BBC, 2005; The Economist, 2015). To quote one widely known fact, second- and third-generation children of immigrants from former French colonies are still not uniformly considered "French" (Stille, 2014).

Even at the highest levels of the French government, a debate over French national identity has long been encouraged. In 2009, President Nicolas Sarkozy gave a speech wherein he called for an examination of what it meant to be French as a way to resist extremists. He specifically named certain activities as contrary to French national identity, such as the

wearing of the burqa and inadequate effort to find a job while receiving social services, and equated becoming French with "adher[ing] to a form of civilization, to values, to morals" (Le Monde, 2009). Leading up to the 2017 presidential elections, Sarkozy famously said that the ancestors of the French were the Gauls, that being French meant speaking French and living like a French person (Bonnefoy, 2016). Evoking the Gauls in this way erased not only the history of many of his fellow citizens but also his own family background. At the time of this writing, two years after the study abroad program took place, the 2017 French presidential elections have just taken place. The controversial far-right Front National, led by Marine Le Pen, gained prominence and legitimacy on an explicitly anti-immigration and anti-Islam platform, winning approximately one third of the vote. To underscore the prevalence of far-right ideologies, François Fillon, presidential candidate for the center-right Républicains, has borrowed decades-old rhetoric from Le Pen's father, denouncing "anti-French racism" by other (non-White, Muslim) French citizens within France (Pecnard, 2017). French identity has thus been constructed in the public sphere as a function of both what it is and is not, along any number of what linguistic anthropologists following Gal (2012) refer to as *axes of differentiation*.

In light of what precedes, it can be unequivocally assumed that students in this study abroad program were entering an environment of fraught and fractured collective identities. In this context, being born and raised in France or even in the Paris region did not necessarily guarantee equal treatment - or even equal identification - as "French" or as "Parisian." Participants in this study could have heard stances on this debate either explicitly from the people they encountered in Paris or from media or other experiences they consumed there. Alternatively, if they had only minimal interactions with residents of their host community, their views of Parisians may have remained unembellished. According to these study abroad participants, is a Parisian rich or poor? Educated or uneducated? Urban or rural? Secular or

religious? White or Black? Friendly or rude? Is it different to be Parisian than it is to be French? The crumbs of discourse that emerged in participant interviews were not extensive enough to address the full complexity of French and Parisian identities, but could still inform an interpretation of how these students viewed the (at least prototypical) residents of their host community.

Language Contact and Context in Language Learning

Along these same lines, research has increasingly shown that differences in students' backgrounds and contact[1] with the host community and other L2 speakers have effects on their gains in target language proficiency. A principal theme of inquiry in this dissertation is the difference in language acquisition for study abroad students who had different living arrangements in Paris. This is operationalized as differences in learning *context*, most specifically with the assumption, which was conveyed to the students when they chose their living arrangements, that students who stayed with host families would have more opportunities to speak French (and therefore hear fine-grained phonetic differences) than those who stayed in dormitories.

General target language proficiency

One study with the most similarity to the goals of the present dissertation was conducted by Hernandez (2010a, 2010b). The first part of his study sought possible correlations between motivational factors, time spent speaking with native speakers, and oral proficiency developments in study abroad learners traveling to Spain. For the first part (Hernandez, 2010b), Hernandez administered a Language Contact Profile, Simulated Oral Proficiency Interview, and a questionnaire that included questions about integrative and instrumental motivations, based on part of the Attitude/Motivation Test Battery. In addition

[1] Here, *contact* will refer to interactions between bilingual individuals or between a developing bilingual individual and a monolingual speaker of his or her L2. This concept will not be used in this study with reference to contact between populations or to societal bilingualism.

to finding a significant increase in oral proficiency after a semester abroad, he found that the amount of student interaction with Spanish speakers was significantly correlated with these proficiency gains. He also found that integrative motivation correlated significantly with time spent interacting in Spanish, while instrumental motivation did not. Those students who lived with host families improved in their proficiency more than those who did not.

In the second part of his study, Hernandez (2010a) administered the same battery of tests and questionnaires to "at home" students of Spanish, taking classes on campus, that he had administered to the students studying abroad in Spain. He found that there was no significant difference between the motivational profiles or proficiency levels of the study abroad and "at home" learners who took courses on their home campus only, but that the study abroad learners made greater gains in their oral proficiency and spent more time interacting with the Spanish language than their peers who had stayed home. At home students' amount of interaction with the target language was not a significant predictor of proficiency gains, as it had been for the study abroad students. Hernandez recommended mimicking features of the study abroad experience to improved proficiency outcomes for students staying at home.

Magnan and Back (2007) performed a study in which they administered an Oral Proficiency Interview (OPI), a Language Contact Profile (from Freed et al., 2004), and language self-assessment questionnaires before and after American university students spent a semester in France. These authors found that study abroad did not appreciably facilitate L2 acquisition for all students. The biggest predictor of proficiency gains for these study abroad students was the amount of coursework they had previously done in French back in their home university. Interestingly, those students who spoke French with other Americans seemed to be impeded in their acquisition. This shows that not all types of exposure to the target language are equally beneficial for L2 acquisition, and that interactions with native

speakers of the target language are more beneficial for acquisition than interactions with other learners.

Other studies have shown that staying with a host family, as opposed to a dormitory or other housing, can influence study abroad students' target language acquisition. However, such host family experiences can vary greatly, and do not guarantee proficiency gains. Di Silvio, Donovan, and Malone (2014) administered Simulated Oral Proficiency Interviews to study abroad students learning Spanish, Mandarin, and Russian. They also administered surveys about the experience to both the students and to their host families. They found a significant positive correlation between students' happiness with their homestay placements and gains in target language proficiency, as well as a positive correlation between satisfaction with their homestays and with their target language development. This further illuminates the need for study abroad research to consider the quality of contact with native speakers in addition to the context of that contact.

Second language phonology

As mentioned above, the main goal of this dissertation is to examine how all the above factors influence, if at all, the acquisition of native-like local phonetic features in French learned in Paris. Thus, it is necessary to include a review of the relevant literature of the acquisition of highly proficient pronunciation in study-abroad contexts.

In their book chapter, Howard, Mougeon, and Dewaele (2013) reported on variety of notable studies that combined sociolinguistics and second language acquisition to examine the effects of the context of learning on the acquisition of dialectal features. One such study by Blondeau et al. (2002) found that Anglophones in Montreal who reported the most contact with Francophones were also more likely to produce native-like morphosyntactic variants, such as using the pronoun *on* for the first person plural and the deletion of the article *l'* and

the negative particle *ne.* The authors also found that contact with local speakers of French positively correlated with the affrication of the consonants /t/ and /d/, a feature which is specific to the French spoken in Quebec.

In a study about level of instruction, perceived foreign accent in Spanish, and motivation, Martinsen, Alvord, and Tanner (2014) studied a group of students using a battery of background questionnaires. This battery of questionnaires asked about their experiences abroad and in coursework, and also included a motivational intensity questionnaire based on Gardner's (1985b) Attitude/Motivation Test Battery, and a spontaneous speaking test based on the OPI. The speaking test was evaluated by a panel of native Spanish speakers, who marked the level of foreign accent they perceived in each participant's spoken Spanish. Martisen and his co-authors found that those students who had spent extended amounts of time abroad had more nativelike pronunciation than those who had not, but that these students still sounded far from nativelike. They pointed out the tendency of foreign language proficiency in general, and pronunciation in particular, to cease progressing or even to fossilize when learners' communicative needs are met. In their study, motivational intensity was also found to be a significant factor in achieving more native-like pronunciation. However, motivational intensity still accounted for a very small percentage of the variance compared to time spent abroad. The present study focuses on the motivation and phonemic acquisition of a subset of an American college student population who studied abroad in Paris. The participant sample controlled for time spent abroad by following students who participated in the same program at the same time and controlled for variability in pronunciation by investigating students' fine-grained phonemic awareness rather than holistic ratings of their pronunciation by humans.

Martinsen and Alvord (2012) followed students on a short-term study abroad program in Argentina to find whether their overall cultural sensitivity correlated with improvements in

Spanish pronunciation. They administered a questionnaire called an Inventory of Cross-Cultural Sensitivity before and after study abroad to measure the extent to which students were open to new cultural experiences in general, and administered a Test of Oral Language Skills in Spanish, which was based in part on a task from an OPI. Spanish pronunciation was graded impressionistically by native speaker raters. Martinsen and Alvord found that those students with higher pre-program cultural attitude scores were more likely to improve in their pronunciation, and that those with lower pre-program attitude scores increased in their attitude scores but were less likely to improve in their pronunciation. Importantly, the authors noted that the attitudinal measurements were based on general cultural awareness of the Spanish-speaking world and not on the specific host community in Argentina, since they did not expect the students to harbor preconceived opinions about Argentina. The present study, in contrast, assumed that students of French would have previous exposure to ideas about Paris, and that it would therefore be appropriate to ask more specific questions about attitudes toward the host community.

One of the most pertinent studies regarding the acquisition of segmental features of second language phonology in study abroad was conducted by Diaz-Campos (2004). His study focused on the acquisition of ten specific consonants that carry phonemic or allophonic value in Spanish - but which are not present in American English - among university students studying abroad in Spain and remaining at home in the United states. One of the research questions in his study concerned the order of acquisition of different types of consonants, which is a relevant question in the field of phonology, but not generally a question of sociolinguistic importance. It will also not be a concern of the present study. In Diaz-Campos' (2004) study, participants were administered a Language Contact Profile (based on Freed et al., 2004), an OPI, and a read-aloud task that contained the target consonants. The study was innovative in its inclusion of segmental contrasts, but it was unclear in the article

how the students' pronunciation was rated. Diaz-Campos found that students were more likely to faithfully reproduce native-like consonants if they had had more years of Spanish instruction, if they started the semester with a higher proficiency rating on the OPI, and if they had spent more time speaking Spanish during the semester. Students both at home and in Spain improved in their native-like approximation of the target sounds, with students who stayed home making even larger gains. However, Diaz-Campos took care to mention that this finding could be complicated by the fact that some of the students who stayed home that semester had much more previous coursework in Spanish than those who had gone to Spain. Similar to Diaz-Campos (2004), the present dissertation also considered the acquisition of specific segmental features, overall target language proficiency, and the amount of time spent speaking the target language while abroad.

Previous studies have also shown that intensive contact with members of a target language community can improve students' confidence in understanding the target language. Cubillos et al. (2008) compared the listening skills of students taking five-week language intensive Spanish classes on their home campus in the US and in study abroad programs in Spain or Costa Rica. The authors administered the listening section of an Advanced Placement exam, as well as a Metacognitive Awareness Questionnaire to ask the students what strategies they used in their listening. Although students both at home and abroad improved their target language listening abilities during their five-week courses, the students who had studied abroad reported that they used more social and top-down listening strategies, such as guessing unknown words based on the context and asking the speaker for clarification. The study abroad participants also reported that they felt more confident in their listening comprehension, and 40% of them reported that contact with native speakers outside class had helped their listening comprehension (Cubillos et al., 2008).

Another foundational study in the field of study abroad and language acquisition was conducted by Segalowitz and Freed (2004), who included cognitive and situational factors in comparing the oral proficiency of students of Spanish who stayed home to those who went abroad for the same semester. These authors administered their Language Contact Profile, an official ACTFL OPI, a computerized test measuring participants' speed and efficiency of lexical access, and a computerized test to measure attention control. They also measured elements of students' spoken fluency, such as words per minute and hesitations. Their study found that study abroad students increased in their (holistically and synthetically measured) oral proficiency significantly more than at home students. However, the authors did not find a significant effect of time spent speaking Spanish on these oral proficiency gains. In fact, they found that those who spent the most time speaking with host families had significantly shorter "longest turns" (the longest uninterrupted utterance in the OPI), which the authors explain as potentially being a result of communicating mainly with routine, formulaic expressions rather than using spontaneous sentences. The researchers also found a significant positive correlation with oral proficiency and the cognitive abilities that they measured, as well as a surprising negative correlation between the study abroad context and attention control, which they attributed to the greater cognitive challenge of being abroad (e.g., culture shock or the work involved in operating in a nonnative language). They argued that, while cognitive processing prior to the semester influenced oral proficiency, this did not represent an immutable aptitude of the participants. They concluded that in order to reap the greatest gains in oral production, it could benefit foreign language students to wait until they are linguistically and cognitively ready for the demands of a study abroad program before sending them overseas. This may have implications for the present study, as participants began the program with different levels of proficiency in French as well.

Linguistic Factors

Nasal vowel rotation and perception

Phonemic vowel nasalization is a relatively uncommon phenomenon in languages of the world. Among those with the largest speaker populations, contrastive vowel nasalization exists in French, Portuguese, Hmong, and Hindi. In the case of French, there is evidence that this nasalization occurred during the Old French period between the 9th and 13th centuries, and was completed by the beginning of codification by the Académie Française in the 17th century. First, oral vowels followed by nasal consonants regressively nasalized (VN>ṼN), and later the nasal consonants were elided in speech, though retained orthographically (ṼN>Ṽ). In the 16th and 17th centuries, some nasal vowels whose following nasal consonants were retained in the following syllable underwent denasalization. Currently, phonemic nasalization only occurs in contexts where the nasal consonant historically occurred in the same syllable as the vowel in question (Alkire & Rosen, 2010; Morin, 2002; Sampson, 1999).

There is considerable dialectal variation in the realization of nasal vowels, notably in the realization of the nasal coda consonant and in lingual articulation. Sampson (1999) identifies three different dialectal regions whose nasal vowel systems developed separately from one another. The *langue d'oc* region in the south of France will not be discussed. The present study focuses on the nasal vowel system that is common in part of the *langue d'oïl* region surrounding Paris, in north central France, which has "come to form the basis of standard French today" (Sampson, 1999, p. 54) and which corresponds to the dialect area commonly referred to as Northern Metropolitan French.

Most varieties of French have retained four canonical nasal vowels: /ɛ̃/, /œ̃/, /ɑ̃/, and /ɔ̃/. However, in Northern Metropolitan French, evidence suggests that a merger has occurred between the front vowel /ɛ̃/ and the central vowel /œ̃/. This was attested in perceptual research by Martinet (1952), who stated that the contrastive nature of these two nasal vowels

was no longer necessary because /œ̃/ carried a much lower functional load than /ɛ̃/. The merger was corroborated by Malécot and Lindsay (1976) through spectrographic evidence from "cultivated middle-class Parisians" (p. 46). Functionally, Parisians no longer reliably produce the central nasal vowel /œ̃/, and this vowel was therefore omitted from the present study.

In addition to - and perhaps conditioned by - the merger of the front and central nasal vowels, the lowered front nasal vowel /ɛ̃/ instigated a counter-clockwise push-chain shift. This chain shift was attested with impressionistic and spectrographic evidence by Fonagy (1989), who showed that /ɛ̃/ could variably sound like /ɑ̃/, and that /ɑ̃/ could sound more like /ɔ̃/. This rotation thus created confusion between words containing minimal pairs that were adjacent in the periphery of the vowel space, such as *intérieur* and *antérieur* (Fonagy, 1989). This rotation was also discussed by Fagyal, Kibbee, and Jenkins (2006), along with a rotation in the opposite direction in Quebec French.

The documentation of the nasal vowel rotation in terms of underlying lingual articulation was further elaborated by Carignan (2013) using an electromagnetic articulograph. He tested 13 speakers of Northern Metropolitan French and two speakers of Quebec French who produced words containing nasal vowels while the research equipment used sensors to track the movements of their tongues and lips through four dimensions. This data corroborated the impressionistic and acoustic evidence for nasal vowel rotation with lingual articulation.

To triangulate the production of the rotated nasal vowels with their perception, Nicholas et al. (2014a, 2014b)created a nasal vowel perception experiment using audio recordings from two of Carignan's (2013) participants. They administered this perception experiment to 31 speakers of Quebec French and 39 speakers of Northern Metropolitan French, and found that these participants were much more accurate in identifying the nasal

vowels of their own dialects than that of the other dialect, and that those vowels that caused the greatest perceptual confusion were those that were adjacent on the periphery of the vowel space. They also found generational differences, suggesting that these nasal vowel shifts in these two dialects are ongoing changes. This perception experiment was used in the current dissertation, where study abroad students' results were compared to those of native speakers from Paris.

Nasal Vowel Perception as Proficiency

The acquisition of certain dialectal features has been previously investigated in other study abroad contexts as well, as this type of acquisition is considered an element of sociolinguistic competence, and thus an important component of oral proficiency within a speech community. Most notably, previous researchers have explored the acquisition of dialectal consonant features in Spain (Diaz-Campos, 2004; Knouse, 2013; Ringer-Hilfinger, 2012). These researchers have claimed that pronunciation tends to become more nativelike after immersion experiences, but less is known about perception in a natural context, which is arguably subject to less self-monitoring.

Loudermilk (2013) reviewed the results of several types of psycholinguistic studies, including a few on *perceptual learning*, which he defined as a process by which "exposure to phonetic variation can (…) alter the nature of linguistic and sociolinguistic representations" (p. 139) in speakers' minds. However, the studies discussed in the review had all exposed participants to novel dialectal variation to test their learning in a tightly controlled, synthetic setting. The present study breaks with the previous tradition of restricting controlled experimentation to laboratory settings. It takes elements and methods of previous laboratory studies and performs a forced-choice nasal vowel identification task in real-life settings. It thus adds real-world authenticity to participants' dialectal exposure, but also adds the

limitation of having to measure participants' acquisition after study abroad rather than monitoring it in real time.

Proficiency

An important component of the present study is the tracking of changes in overall language proficiency at the beginning and end of the study abroad program. For research such as this, where the linguistic practices of L2 learners are under investigation, it is important to include a measurement of L2 proficiency to serve as the backdrop against which fine-grained phonetic changes could be measured. However, due to the multitude of definitions of proficiency, an essential component of this measurement is to be specific about what will be considered "proficiency" and how this will be operationalized.

According to ACTFL, proficiency is related to the breadth and depth of communicative tasks that foreign language learners are capable of performing interactively, and which can be revealed in an OPI (American Council on the Teaching of Foreign Languages, 2012). The Common European Framework of Reference for Languages uses a similar definition, where proficiency is operationalized as the ability to perform linguistic tasks in increasingly complex intellectual and social contexts (horizontal dimension) and with greater ease over time (vertical dimension) (Council of Europe, 2001). However, frameworks such as these that conceptualize proficiency as a constellation of discursive functions allow for the possibility that highly educated L2 speakers might achieve higher proficiency scores than native speakers (Hulstijn, 2011). Therefore, as the present study pertains to the acquisition of native-like allophonic variation, necessitating a comparison with native speakers, a more cognitive, psycholinguistic model of language proficiency was selected, following Hulstijn (2011):

> *"Language proficiency* (LP) is the extent to which an individual possesses the linguistic cognition necessary to function in a given communicative situation, in a given modality (listening, speaking, reading, or writing). Linguistic cognition is the combination of the representation of linguistic information (knowledge of form-meaning mappings) and the ease with which linguistic information can be processed (skill). Form-meaning mappings pertain to both the literal and pragmatic meanings of forms (in decontextualized and socially-situated language use, respectively). Linguistic cognition in the phonetic-phonological, morphonological, morphosyntactic, and lexical domains forms the center of LP (*core components*). LP may comprise *peripheral components* of a less-linguistic or non-linguistic nature, such as strategic or metacognitive abilities related to performing listening, speaking, reading or writing tasks." (p. 242)

Some study abroad researchers, such as Badstübner and Ecke (2009), have used student self-assessments rather than external measurements to track learner proficiency because they reflect students' perceptions of their own progress. Other study abroad researchers have used precise measurements of speech as a way to approximate learners' global proficiency. Although most of these researchers use the term "proficiency," this choice of nomenclature is arguably imprecise and might more accurately be called "fluency" or "accuracy." Llanes and Munoz (2009), for instance, studied Spanish students in three- and four-week summer programs in Anglophone countries. Students were recorded in interviews and while performing a picture-elicited story task where they were asked to describe or narrate what was happening in a series of pictures. Using these recordings, the researchers counted speed (syllables per minute), ratio of borrowings from other languages, number of hesitations, and the length and number of pauses in L2 learner speech. These authors also used accuracy measures to calculate the proportion of error-free clauses to errors. The

linguistic analysis of morphosyntactic errors revealed that students who stayed for four weeks rather than three weeks improved their accuracy on the proficiency measurement more than their counterparts in the three-week program, and that those students with lower proficiency at the beginning of the program gained the most in proficiency at the end of the program (Llanes & Muñoz, 2009). The study, however, did not extend to phonology.

For the present study, global L2 proficiency was quantified without the time and expense needed for an OPI by using instruments with a more psycholinguistic focus: a cloze test and an Elicited Imitation Test (EIT). When combined, these tools aimed to measure learners' knowledge of syntax, morphology, vocabulary, pronunciation (including fluency and prosody), as well as comprehension in both listening and reading. Although they constitute part of L2 proficiency, pragmatic and sociolinguistic competence were not measured due to time constraints.

The EIT in this study was based on that developed by Gaillard (2014a, 2014b) for her dissertation at the University of Illinois at Urbana-Champaign, and tested by Gaillard and Tremblay (2016). This test was developed as an instrument to place students in the level of French course most appropriate to their abilities, although, according to ACTFL, proficiency is unrelated to the content of any particular curriculum (American Council on the Teaching of Foreign Languages, 2012). The EIT is attractive for this use because it is fast to administer and is graded asynchronously. It uses accuracy as a proxy for the cognitive aspects of language proficiency.

Elicited imitation tests (EITs) are non-communicative language proficiency testing instruments wherein participants are asked to repeat target sentences quickly and accurately. EITs operate under the assumption that language proficiency includes implicit grammatical knowledge that can be displayed with automaticity, in addition to explicit grammatical

knowledge that can be drawn upon to construct output when given the time to do so, as in a writing task (Sarandi, 2015). According to Van Moere (2012), part of language proficiency relies on chunking syntactic elements and frequently co-occurring words and expressions in memory for automated access. In this way, when EITs are done well, they should be valid measurements for this type of implicit, automatic learning. Researchers also recommend that there be a time gap of at least three seconds enforced between hearing the target sentence and being asked to repeat it. This could minimize the possibility that the acoustic and articulatory stimulus is being stored in working memory and parroted back without regard to meaning (Spada, Shiu, & Tomita, 2015).

The construct validity of EITs has been examined by researchers in recent years. Sarandi (2015) found that language learners were more accurate in reproducing grammatical sentences than ungrammatical ones, which implies that grammatical knowledge is indeed necessary for success on an EIT. However, he found that the length of ungrammatical target sentences did not correlate with participants' overall scores. This complicates the assumption that length and complexity of sentences have an effect on accuracy, though there was a significant correlation between sentence length and accuracy for grammatical sentences, which is positive for the future use of EITs for measuring grammatical knowledge. Spada, Shiu, and Tomita (2015) compared the results of an EIT to those of a written proficiency test and found that participants tended to perform better on the grammatical element under investigation in the written test, when they had more time to access explicit, metalinguistic grammatical knowledge, than on the more rapid task of the EIT. This implies that there is indeed a difference between explicit and implicit grammatical knowledge that may be assessed separately using instruments such as an EIT.

To further justify the usage of EITs in second language acquisition research, Yan et al. (2016) conducted a meta-analysis of 21 studies to explore whether this type of instrument

demonstrated construct-related validity and the ability to discriminate between proficiency levels. They found that, in the studies they analyzed, EITs were able to strongly discriminate between speakers of different proficiency levels. They also learned that the validity of EITs was affected by the length of target sentences, the delay before target sentence repetition, grammatical complexity, and the complexity of the grading rubric. They recommended detailed reporting of methodology for researchers using this type of instrument, endorsing its continued use.

The other quantitative proficiency measurement in the present study was a cloze test developed by Tremblay and Garrison (2011; 2010). As mentioned above, this test was intended to measure reading and writing proficiency through the targeted deletion of lexical, grammatical, and discursive elements of a text, which participants would then fill in. Each item's scoring was binary for accuracy, based on an answer key that specified all possible correct answers. Tremblay tested this instrument with 169 learners of French who were students in different levels of university coursework in French. She found that the scores were close to a normal distribution. The test yielded clusters of participants that could be used to inform placement and research (Tremblay, 2011). Since participants were able to take their time on this instrument, explicit grammatical knowledge is likely to have had a greater impact on their scores on the cloze test than on the fast-paced EIT.

Finally, a subjective proficiency self-assessment was included in the battery of questionnaires. This was adapted from those included in the Language Contact Profile (LCP) (Freed, Dewey, Segalowitz, & Halter, 2004) and Language Experience and Proficiency Questionnaire (LEAP-Q) (Marian, Blumenfeld, & Kaushanskaya, 2007). It asked participants to rate their own proficiency levels in reading, writing, speaking, and listening for each language they knew, to list their background in each of these languages, and to rank how proficient they felt they were and the percentage of time they spoke each language. This self-

assessment was intended to provide a comparison between students' perceptions of their own language abilities and the quantitative measurements, as well as to provide a richer picture of participants' interactions with their host community in Paris.

Research Questions

Gap in Research

In summary, it is not yet known whether and to what extent study abroad students acquire local dialectal features depending on their motivation, identities, or proficiency. Previous research has shown that language learners' motivation and identity can affect gains in target language proficiency, as can their identifications with members of the host community (Isabelli-Garcia, 2006). It has also been shown that study abroad students can improve their pronunciation and listening, at least impressionistically (Llanes & Muñoz, 2009). In Paris, native speakers both articulate and perceive local nasal vowels (Carignan, 2013; Nicholas, Fagyal, Carignan, & Shosted, in preparation), but it is unknown whether learners would do the same. The present study asked whether and to what extent these factors correlated.

Research Questions

As motivated by the literature discussed above, the research questions that guided this study are as follows:

Social Factors:

> RQ1a. Will study abroad students learning French accommodate to ambient speech patterns during their study abroad program and acquire the nasal vowel perception patterns of the dialect of their host community in Paris?

RQ1b. What are students' beliefs about the local community and its language? How do these affect (if at all) their motivation to improve the proficiency and accuracy of their spoken French?

Learner Factors:

RQ2a. Will study abroad students with a strong *ideal self* motivation towards the local community acquire the dialect-specific nasal vowel perception patterns more accurately than students with lower integrative or ideal self motivation studying in the same environment?

RQ2b. What other factors (such as proficiency or contact with native speakers) affect the acquisition of nasal vowel perception?

CHAPTER 3: METHODOLOGY

Introduction

The present study was designed pragmatically, using available instruments that would best address the research questions: linguistic or social factors were quantified and then interpreted with ethnographic and interview narratives. This combination and integration of quantitative and qualitative methods has also been conceptualized as a mixed methods research paradigm (Creswell & Plano Clark, 2011; Greene, Caracelli, & Graham, 1989). Rather than focusing purely on factors to build a quantitative model, the present study centers on the actors themselves, as is customary in more recent studies in sociolinguistics (McAll, 2013) and certain subfields of second language acquisition (Howard et al., 2013).

Within this pragmatic worldview, different approaches came into play at different levels of the study. The perception of locally salient nasal vowels constitutes what will be referred to as the *nucleus* of the study[2], which has motivated the choice of the predominant dependent variable in these quantitative analyses. All other elements of the present study function both independently from and interconnectedly with this nucleus, like the organelles of a cell. The other areas of inquiry in this study will be referred to as *themes,* taken to motivate independent variables for nasal vowel perception. The three themes will be as follows: L2 language proficiency, L2 identity and motivation, and contact with and ideology about the host community.

Seeking to understand how these themes influence the perception of locally-relevant fine-grained phonetic contrast (in this case, nasal vowel perception), the present study will seek to establish correlations (if any exist) between the results of a nasal vowel perception experiment (motivating the dependent variable) and the other three themes (operationalized

[2] This is not to be confused with the nucleus of a syllable.

as independent variables). This quantitative analysis will be supported and interpreted using interviews and ethnographic observations, with the understanding that the identities that emerge are socially constructed.

A mixed methods design was also chosen for this study to fill gaps in previous study abroad research. Findings were thus able to emerge that may have been missed with the restricted sets of questions in existing instruments. In this case, mixed methods were used to seek complementarity between quantitative and qualitative datasets that were collected simultaneously to address themes that were related but not identical, as described by Greene, Caracelli, and Graham (1989).

Researchers have found that L2 motivation and social group membership can influence proficiency gains during study abroad (Isabelli-Garcia, 2006). However, most previous research on proficiency in study abroad did not examine phonemic acquisition in a systematic, quantifiable way. Rather, it typically employed suprasegmental measurements of pronunciation, using human raters, as in Oral Proficiency Interviews (OPI), or easily quantifiable features of fluency, such as the length of pauses (Llanes & Muñoz, 2009), but only very rarely quantified changes in segmental features (Bongiovanni, Long, Solon, & Willis, 2015; Knouse, 2013). We know that native speakers of French perceive and articulate the rotation of nasal vowels (Nicholas et al., 2014a, 2014b), but it is unknown whether learners of French also perceive them. Moreover, previous research did not explore whether or to what extent this phonetic perception, motivation, identity, and proficiency may relate to one another.

This chapter includes an overview of the study's design, its sampling procedure, and data collection and analysis procedures organized thematically.

Participants and Sampling

This study received approval from the Institutional Review Board in January 2013. The participants in this study were 12 undergraduate students of L2 French in a semester-long study abroad program in Paris. This was a cluster sample (Teddlie & Yu, 2007), where all students in the program were invited by email to participate. All students who agreed to do so were included in the study.

For the focus group interviews, all students were invited to participate by email and in person when the researcher was on-site in Paris. This was also partly a cluster sample, since all participants in the study were invited to attend these focus group interviews, but it also had an element of convenience in the sampling because the students' participation depended on whether and when their schedules overlapped. The program faculty and staff with whom the researcher had informal discussions were recruited casually in person while she was on-site. This would best be defined as a convenience sample.

At the time of the study, the researcher was one of the graduate assistants working with the study abroad program, so the students all knew her personally prior to initiation of the study. Participants were approached via email, making it clear that participation was optional and that there would be no repercussions from the researcher or from the program if they chose not to participate. The participants were compensated for their time with a small monetary reward for each interview and experimental session, and food and drinks were provided for the focus group interviews. They were also provided with their proficiency scores and asked to pick their own pseudonyms.

The data for each participant have a high level of detail. However, as a result of the smaller sample size, statistical analyses were not possible, and correlations were used to investigate tendencies. This imposed a necessary tradeoff of representativeness in the

quantitative data for greater *saturation* in the qualitative data, eliciting as much information as possible from the participants within the practical constraints of the study (Teddlie & Yu, 2007).

Descriptions of Participants

The twelve participants were undergraduate Sophomores, Juniors, and one Senior between the ages of 19 and 21. Only three students (George, Jaynie, and Cady) were majors in French, and all of these were double majors. Ten participants were monolingual English speakers in early childhood. Two participants (Zendo and Amy) spoke Indian languages including Hindi, which is relevant to this study because Hindi contains nasal vowels and could therefore influence their French nasal vowels. What follows is a brief description of each participant based on information in their questionnaires. Unless otherwise noted, the participants were native speakers of English and grew up in the Midwestern United States.

François was a Junior majoring in Earth, Society, and Environment. He had extended family members living in France and Israel and had visited both places before, including two weeks near Strasbourg as part of a program in high school. He spoke some Hebrew. François enjoyed listening to French podcasts before the program. He was placed in a host family in Paris and acted as the organizer for group outings and travel. Prior to the program, he said that he wanted to go to Paris to learn "one of the mainstream dialects" and that he expected to become a culinary "snob."

Zendo was a Junior, an international student from India who was attending university in the United States. Her major was Global Studies, for which studying abroad was a requirement. She spoke both English and Hindi at home with her family, but was educated exclusively in English. She decided to stay in a *foyer* while in Paris. She looked forward to finding the hidden gems of Paris, saying:

> "You have to do what the locals do, which is what I'm hoping I can get out of that. That, you know, be interacting wiiith local Parisians I may find out more about, like, you know, the lesser well known things about Paris, that not, because the first thing you think of when you go to Paris is Oh! The Eiffel Tower. But there's more to see than that, obviously."

George was a Sophomore. He was a double major in French and Physics, and wanted to study abroad early in his studies so that it would not interrupt his required science courses. He had taken French in junior high and high school and had traveled to France and Quebec for no more than three days at a time prior to the program. He decided to stay in a *foyer* while in Paris. He said that he was interested in spending time in Paris in part because it was a large metropolitan area and would have people around who spoke English if he really needed. George's emphasis was frequently on his personal responsibility, as when he said, "I'm there with a purpose and that purpose is to, uhh, better my, um, abilities to speak French and to um understand the culture, so umm, that's on *me*."

Cady was a Junior with a double major in French and Communications. She had taken French in junior high and high school, and had traveled to other parts of Europe. She enjoyed watching cartoons dubbed in French. She was placed in a host family in Paris. Cady listed different places she would like to visit in Paris, such as museums and cafés, and was excited to have so many things to do in one location. She also placed an emphasis on her desire to integrate into the community: "I'm just hoping to go in and kind of, like take it all in, like yeah, some things might be awkward, but I don't wanna look at it as being, like, like *awkward*, I just wanna be like, 'Okay, you know, I have to be French now!' You know, 'This is what they do!'"

Gordon was a Junior with a double major in Economics and Commercial French. He had taken French in junior high and high school, and some German, and had previously traveled to France and Spain. He was placed in a host family in Paris because he wanted to do the same thing as "French kids my age"[3]. Gordon had briefly visited Paris before, and found it "charming." He described Parisians as knowledgeable and said that he did not want to embarrass his host family, saying, "I mean, I just, I guess I expect that since there *is* so much culture and art to the *city* thaaat it's like second nature *to* Parisians that they, you know, they know everything."

Blair was a Sophomore and the youngest of the group. Her major was Journalism with a minor in French. She had taken French in elementary school (though she specified that this was "VERY basic") through high school. She enjoyed following social media in French, particularly Twitter. Blair was placed in a *foyer* in Paris. She had been to Paris for one day before and had enjoyed it, and looked forward to being in a central location that would permit more travel elsewhere. She said of Parisians: "I'll tell people I'm going to Paris and they're like, 'Oh, somewhere kinda *snobby,*' or they, they, that stereotype that Parisians are snobby."

Clare was a Junior majoring in Psychology. She had taken French in high school and at the university level. She had visited Spain previously, but had never been to France prior to this program. When asked why she wanted to go to Paris in particular, she said, "You know, *Paris* is like this mystical, like, magical place." She was placed in a host family, which she chose for reasons of language and social integration:

> "I knew I would have to be *forced* to speak French or else I would be too shy to, you know, just jump into it myself. So that's why I picked it, but, um, I'm excited tooo,

[3] Surprising the researcher, participants described themselves and their peers as "kids."

and I don't know how much, how realistic this is, but I want to try and become, like, part *of* the *family* and, *close* with, whoever I'm with?"

Jackie was a Senior majoring in Community Health with the intent of becoming a physician. She spoke of wanting to use French in her future career, working with organizations such as Médecins Sans Frontières. She had begun studying French in university and had never traveled outside the United States before this program. Jackie was placed in a host family. She chose Paris in part because the program had the most advertising on campus. She said of the location, "If anything, I think, they would be, more *similar* to, *us*, than, other places because Europe- Europe doesn't seem to be… super*, out there*. Compared to like *American* life."

Hanna was a Junior majoring in Global Studies, for which study abroad was a graduation requirement. She had begun learning French in elementary school, continuing through the university level. She had never traveled to a place where another language was spoken prior to this program. She was placed in a *foyer* in Paris because she said she was shy. When asked about why she wanted to go to Paris, she mentioned movies that were set in the city, adding: "I've always wanted to go to Paris. I've been fascinated with everything even though they're probably all stereotypes but I want to experience it for myself so that's why like what, things like the stereotypes, you know, the Eiffel Tower, the outdoor cafés you know, everything like that, except I've been reading online about negative aspects but I still want to experience those." When pressed about these negative aspects she had seen online, she said that her main concern was that Parisians would be rude.

Gaston was a Junior with a double major in English and Communications. He had traveled to France, Spain, and Mexico, and had taken two years of Spanish in addition to several years of French. He enjoyed chatting with French-speaking friends and listening to

music in French. Although he did not mention this prior to the program, it later emerged that he had relatives in Ireland and reported speaking some Gaelic at the end of the program. Gaston was placed in a *foyer* because he wanted to be able to stay out late. Although he sent in the initial questionnaires at the beginning of the program, his initial interview was conducted halfway through the semester when the researcher came to visit, since he had already left town when the study began. He said that he had heard stories of Parisians being "spiky." He enjoyed traveling, listing the many places he had visited already, and was excited to explore with the rest of the group: "We did get a different monument every night just because we could."

Jaynie was a Junior with a double major in Political Science and French. She had attended a French immersion elementary school followed by a bilingual English-French program for middle school and high school. She had spent three weeks in Rennes, France, when she was 11 years old, in addition to family vacations in several other European countries. Her initial interview was conducted halfway through the program when the researcher came to visit, since she had already left town when the study began. Jaynie was placed in a host family in Paris because she thought it would help her improve her French: "I thought that it would… especially, being in a family environment where I would be speaking at home and not just in school, and I thought that would make the difference and, and I think it has." She said at the time that she was initially afraid of being judged or treated differently, but that it was not the case in reality. She said of her host family, "They treat me like a daughter."

Amy was a Junior majoring in Political Science. She grew up part of the time in India and part of the time in the United States, speaking Kannada, Hindi, and English. She took French from elementary school through the university level, in addition to Spanish in middle school and one semester of college. Her initial interview was halfway through the program

when the researcher came to visit. Amy's descriptions of her reasons for coming to Paris were tailored for a future career. She talked about how her study abroad experience could add to her résumé, and said of her understanding of relations between Europe and the United States: "I could, like, later apply that type of cultural knowledge to more of a professional sphere." She was placed in a *foyer*, but expressed disappointment with it because there were not any Parisians living there and her best friend in the dorm turned out to be American. At the midterm period, she talked about being frustrated that she couldn't understand a comedian who spoke French.

Overview of Design from a Mixed Methods Perspective

A mixed methods design was used to frame this complex study that combines proficiency, host community ideology and contact, and motivation and identity. To address each research question, an embedded mixed methods design was used (Creswell & Plano Clark, 2011), wherein a study whose nucleus is primarily quantitative included additional quantitative as well as qualitative strands of inquiry in order to inform and illustrate the interpretation (Figure 1). More specifically, with a nasal vowel perception experiment as the nucleus, five separate elements of multi-phase research were conducted: two qualitative and three quantitative. These five strands contained multiple instruments and were intended to speak to the three themes that were selected upon reviewing the literature: proficiency, L2 motivation and identity, and contact with and ideologies about the host community.

After data collection and an initial, independent analysis of each research dataset, the results were mixed according to the themes they addressed. Then, the quantitative correlates of these themes were used as factors in a correlation analysis to answer the research questions, and the qualitative results were used to explain and illustrate these results.

Figure 1. Graphic Representation of Mixed Methods Design (continued)

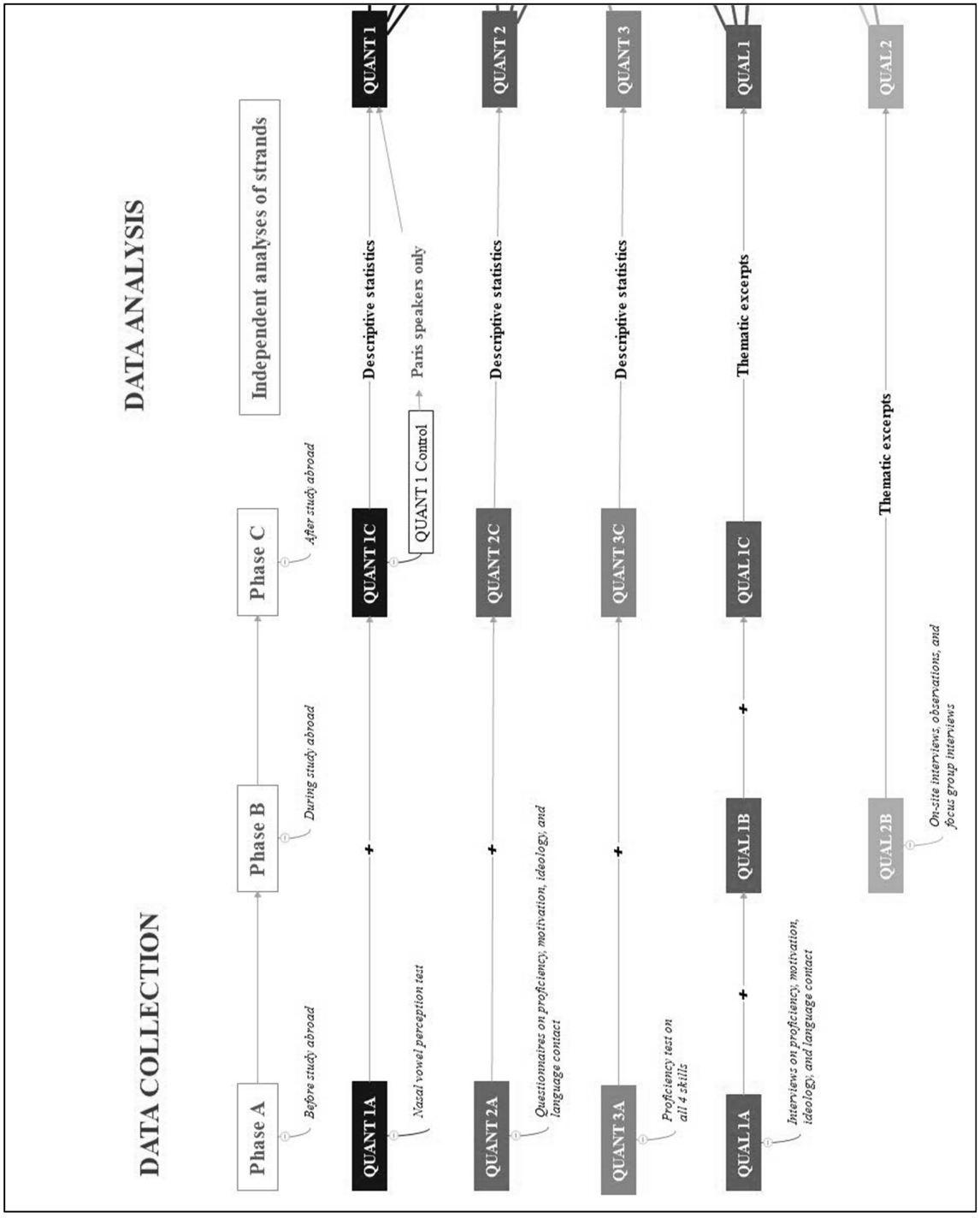
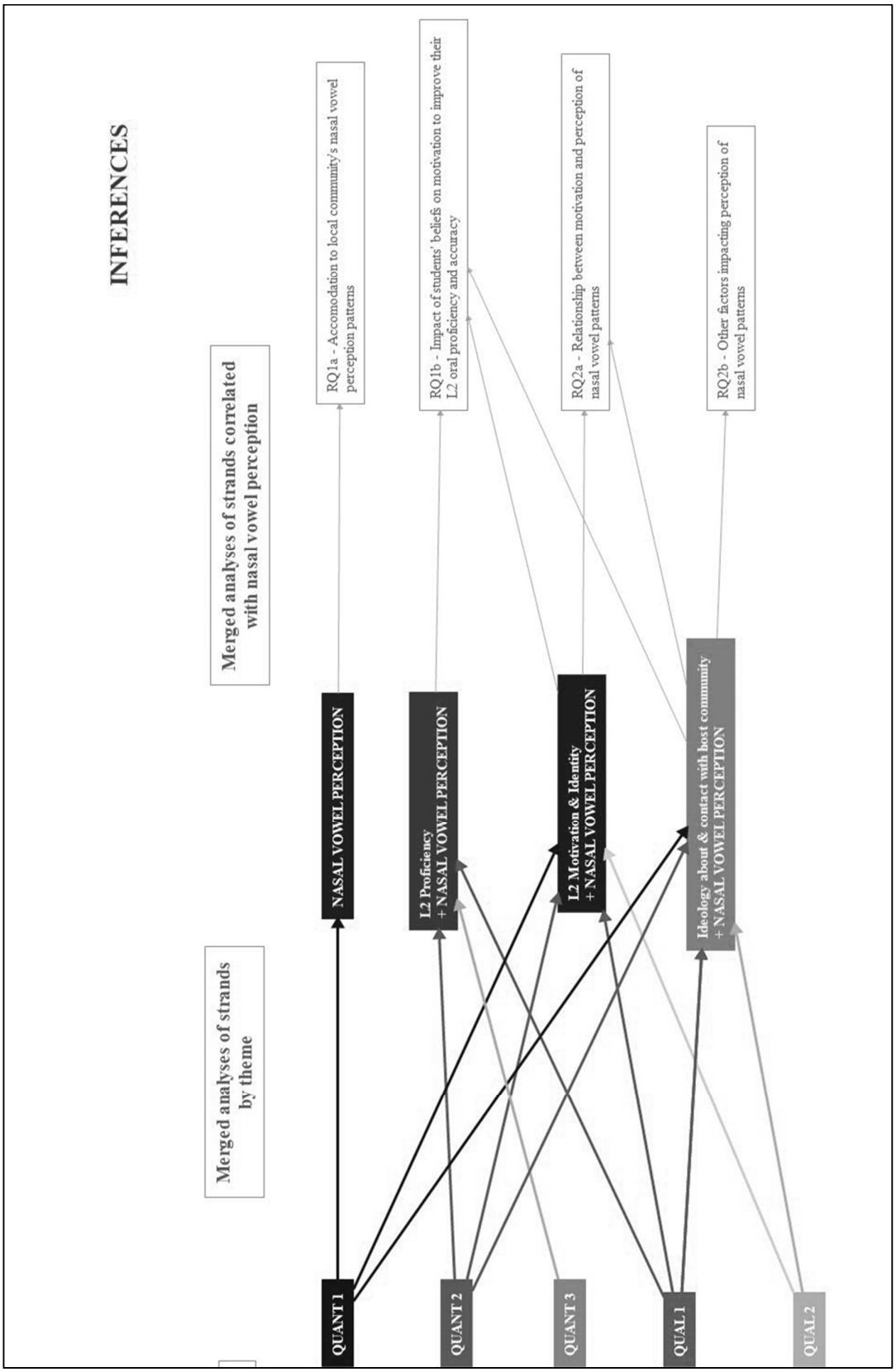


Figure 1 (continued).



Data Collection and Analysis

A study on the perception of nasal vowels was completed with native speakers prior to the present study (Nicholas et al., 2014a, 2014b). The students' results on this nasal vowel perception experiment were compared to this control group. The instruments in this study were selected for each of the three interacting themes of inquiry: proficiency, identity and motivation, and ideology and context in the host community. Data collection was conducted up to three times in a sequence: before participants left for study abroad, during study abroad, and after returning from study abroad. Four datasets were collected prior to participants' departure for Paris, then repeated upon their return to campus after the semester was over. Two qualitative observations were conducted on-site in Paris during the study abroad program.

All of the data collected before and after the study abroad program were collected in two-hour sessions in a quiet space with each participant individually. First, the students filled out the questionnaire packet, which also included the reading and writing proficiency test. Next, they did the nasal vowel perception experiment. To split up the two computer tasks, since they required concentration, participants were interviewed next. Finally, they did the listening and speaking proficiency test. The focus group interviews and informal discussions with colleagues took place on-site in Paris during the study abroad program.

The analysis began by analyzing each dataset separately, then extracting the relevant components to mix them on the basis of the three themes selected from the literature: L2 proficiency, L2 identity and motivation, and ideology about and contact with the host community. Finally, the independent and mixed analyses were combined to allow for a merged analysis, thus permitting the researcher to address the four research questions guiding this study. Due to the small sample size, statistical analyses were not possible for all instruments or for the thematic mixing, and thus some of the results represent only raw

percentages and tendencies. What follows is a description of each of the three themes and the instruments that were used to explore them.

Proficiency

This theme included both the micro-level sociolinguistic competence of local nasal vowel perception and traditional measurements of elements of communicative competence. For this theme, results of each student's two proficiency tests and self-evaluations were compared to look for trends or inconsistencies. The difference between the before study abroad and after study abroad sessions was calculated to provide a numerical representation of how much change had occurred within each proficiency instrument. These results were enriched by comparing the students' actual proficiency scores with their self-reported improvement in their individual interviews. As the most pertinent focus of the study was oral proficiency, the EIT scores received a particular focus, comparing whether participants' living situations correlated with differences in their proficiency gains.

Nasal Vowel Perception Experiment (Before/After Program)

The nasal vowel perception experiment was the nucleus to which all three themes were compared and/or correlated. The most illustrative numerical results of each of the other three themes were inputted into a spreadsheet, along with the calculations for how nativelike participants' nasal vowel perception had been. Using the statistical software, SPSS, Pearson correlations were extracted between these results. The interpretation of these correlations was informed and illustrated by the qualitative findings.

The nucleus of the study was a nasal vowel perception experiment, which intended to address RQ1a, RQ2a, and RQ2b. More specifically, it was intended to explore the acquisition of the nasal vowel contrasts discussed in Chapter 2 within the framework of interactive alignment. This aimed to contribute to the study abroad literature by adding fine-grained

phonetic testing to traditional measurements of global language gains. By focusing on the nasal vowel system, we can learn about the acquisition of a phonetic category that both encodes phonemic meaning and conveys local dialectal identity, assuming that interactive alignment occurs (Pardo, 2006; Trofimovich, 2013). The objective was to determine the extent to which L2 learners of French in Paris were able to perceive dialect-specific nasal vowel contrasts of their target community and thus pattern closely with native speakers from Paris (Nicholas et al., 2014a, 2014b).

Measurements of students' perception of French nasal vowels were taken at the beginning and end of the study abroad program. Students' nasal vowel perception was compared to that of a control group of native speakers from Paris, and each student's perception was compared between the two time points in a pre/post manner.

For the perception experiment, a computerized forced-choice gating task was created in the software E-Prime 2.0. In the experiment, which took approximately 25 minutes to complete, participants heard target words with nasal vowels that were produced by two native speakers: both females in their 20s or 30s, one from Alma, Quebec, and one from Paris. These two speakers were chosen because of their similar age and similar dispersion of production in the vowel space, as determined by Carignan (2013).

The stimulus recordings were all collected by Carignan (2013) during a study on nasal vowel articulation. The perception experiment contained three repetitions of each word per speaker, for 36 words containing nasal vowels and 36 oral vowel distractors (i.e., 72 word pairs total). All words selected in the instrument started with /p/ or /t/ to minimize coarticulation with the nasal vowels. The critical words contained the three nasal vowels shared by the two dialects under consideration. These three vowels will be referred to as the front or PAIN vowel (/ɛ̃/), open or PAON vowel (/ɑ̃/), and back or PONT vowel (/ɔ̃/). The

target words were ‘pain’ (bread) and ‘teint’ (complexion) for /ɛ̃/, ‘paon’ (peacock) and ‘temps’ (time, weather) for /ɑ̃/ and ‘pont’ (bridge) and ‘thon’ (tuna) for /ɔ̃/. There were six distractor words forming the oral vowel minimal pair of the critical nasal vowel words: ‘paix’ (peace) and ‘taie’ (pillowcase) for /ɛ/, ‘pas’ (step) and ‘ta’ (‘your’ singular feminine informal possessive) for /a/, and ‘pot’ (container) and ‘tôt’ (early) for /o/.

This perception experiment design was based on a gating paradigm (Grosjean, 1996; Grosjean & Frauenfelder, 1996). There were three *gates* for each word. For the first gate, the listener heard the first half of the vowel only. The second gate contained the full vowel, and the third gate contained the entire word, including the onset consonant. For example, for the word ‘pont’ (“bridge,” pronounced /pɔ̃/), for Gate 1, participants would hear half the duration of /ɔ̃/; for Gate 2, they would hear the full duration of /ɔ̃/, and for Gate 3 they would hear the full word, /pɔ̃/. At each gate, participants were given a binary forced choice between two words, and they were asked to identify which of the two words they heard. The decision was made to segment the vowels into halves because the Quebec dialect has strong diphthongization and late nasalization in nasal vowels, and it was hoped that this segmentation would help to control for all dialectal characteristics other than vowel quality, which needed to be the sole variable.

Each nasal vowel word was compared against each other nasal vowel word with the same onset consonant and against its oral competitor. For example, for the stimulus ‘pain,’ participants saw trials where they had to choose between the correct answer ‘pain’ and each of its cohort competitors: ‘paon,’ ‘pont,’ and ‘pot.’ These were split into six lists, so that no participant would hear the same token contrasted with more than one competitor. The order of the words on the screen was randomized and then counterbalanced so that each trial pair would have the correct response on each side of the screen the same number of times. The trials were presented in a random order. Participants began the experiment with a practice

session, then were offered an optional break after the first 72 word pairs, after which the 72 pairs were repeated. At the end, participants saw a slide thanking them for their participation and had the opportunity to debrief and ask questions.

Since the nasal vowel perception experiment was the nucleus of the study, the data obtained in this experiment carried more prominence in the analysis than any other dataset. Students' acquisition of the local nasal vowel system was quantified by focusing on the third gate of each target word, where participants heard the full word. The Quebec French stimuli were disregarded as distractors in this analysis since students were not expected to have been exposed to that dialect. Students' accuracy rates were compared for each of the Northern Metropolitan French nasal vowel pairs before and after study abroad. Then, participants' accuracy in identifying NMF vowels in each pair was compared with the accuracy rates of the Parisian native speaker control group to determine how locally nativelike their perception was before and after the program.

Proficiency Tests (Before/After Program)

Students' global proficiency through accuracy was measured at the beginning and end of their study abroad programs to determine whether it correlated with the learners' accuracy in dialect-specific nasal vowel perception and to track their progress over time. These proficiency tests were intended to complement the other measurements addressing RQ2. To assess global proficiency through accuracy in the aural and oral modalities, students participated in an Elicited Imitation Test (EIT) adapted from Gaillard (2014a) (Appendix A). To assess global proficiency as demonstrated through accuracy in reading and writing, they were administered a cloze test developed for learners of French (Tremblay, 2011; Tremblay & Garrison, 2010) (Appendix A).

Oral/Aural: Elicited Imitation Task

The EIT (Gaillard, 2014b, 2014a) consisted of 56 sentences of varying length and complexity. The sentences were presented in lists, each with the sentences in a different order, to prevent possible serial effects in the results. In addition to the 50 sentences used in Gaillard's experiment, six sentences were added to elicit the pronunciation of additional nasal vowels. In these additional sentences, all the target words appeared in sentence-final position for greatest prosodic prominence. For example, to elicit the front PAIN nasal vowel /ɛ̃/ in the target word *pain,* the sentence was added, "Elle est allée à la boulangerie pour acheter du pain" ('She went to the bakery to buy bread'). For the EIT, two of the six target words from the perception experiment were replaced (*paon* 'peacock' and *teint* 'complexion'), since they were of relatively low frequency and learners would be unlikely to produce them spontaneously. These two words were replaced with *main* 'hand' for /ɛ̃/ and *banc* 'bench' for /ɑ̃/. Bilabial consonants were chosen to minimize lingual coarticulation.

The EIT was administered using the experimental software, Paradigm. Participants heard each of the 56 sentences recorded by a native speaker. After hearing each sentence, there was a three-second pause. Then participants heard a beep and had one chance to accurately reproduce the sentence out loud. When they were ready to hear the next sentence, they pressed the space bar. This task lasted approximately 15-20 minutes.

Following Gaillard's (2014a) procedure, each sentence produced by the participants was graded for six different elements: meaning, syntax, morphology, vocabulary, pronunciation, and fluency. The resulting score yielded a global proficiency score as well scores for each specific grammatical component. Each test was graded by two trained raters who were either native speakers or held a Ph.D. in French. Ratings were based on detailed grading rubrics shown in Appendix B). Inter-rater agreement percentages were calculated to check for homogeneity among the raters' scores.

Reading/Writing: Cloze Test

To measure students' global proficiency through accuracy in reading and writing, participants were administered a cloze test developed by Tremblay and Garrison (2010) and tested by Tremblay (2011). This was a fill-in-the-blank proficiency test where 45 content and function words were deleted from a popular press article about global warming. Learners were asked to read the whole passage first, and then fill in as many blanks as they could. The task took 30-35 minutes.

For the cloze test, grading was binary for each of the 45 blanks, according to a rubric of acceptable responses (Appendix A). This yielded a global proficiency score.

Motivation and Identity

For this theme, the goal was to identify the extent to which the students had an integrative or ideal L2 self motivation to learn French and the extent to which their ideal French-speaking self involved an affiliation with the local target language community.

Identity and Motivation Questionnaires.

One of the learner-specific factors that the present dissertation proposed to investigate was study abroad learners' ideal L2 selves as a factor in their motivation to study abroad and learn French. Ideal L2 self motivation was treated as a possible component of learners' interactive linguistic alignment in the local community. In order to categorize learners according to their L2 selves, a modified Attitude/Motivational Test Battery (AMTB) was administered, based on Gardner (1985a) and elaborated by Taguchi et al. (Dörnyei & Ushioda, 2011; Taguchi, Magid, & Papi, 2009), as well as a modified Possible Selves Questionnaire based on MacIntyre et al. (2009) (Appendix C). It was decided to include both of these instruments because the Possible Selves Questionnaire used explicit language asking respondents to identify traits of their ideal L2 selves, while the AMTB addressed the same

motivational and identity themes in a more implicit manner. Therefore, the two instruments were intended to complement each other by seeking motivational factors that participants may or may not have been able to summon consciously. These identity and motivation questionnaires were administered in identical forms at the beginning and end of the program, and took learners approximately 30 minutes to complete.

The modified version of Gardner's AMTB (1985b) was developed to measure non-linguistic elements of the foreign language learning experience among Anglophone students learning French, and was tested by previous research for internal consistency (Gardner, 1985a; Taguchi et al., 2009). The AMTB was modified to eliminate questions that were less relevant to the participant population, such as parental approval and details about classroom learning, and those that had identical wording to the Possible L2 Selves Questionnaire (MacIntyre et al., 2009). The modified AMTB consisted of a series of statements that correspond to seven categories of motivational indices:

- Ideal L2 Self: The speaker of French that participants wished to be in the future (this is similar to what was referred to as "integrative" motivation in previous motivational research, as explained by Gardner (2005))
- Ought-to L2 Self: The speaker of French participants felt like they were expected to be
- Instrumentality (promotion): Good things that would happen in participants' lives or careers if they succeeded in learning French
- Instrumentality (prevention) : Bad things that would happen in participants' lives or careers if they did not succeed in learning French
- Attitudes toward learning French (positive and negative): Whether participants enjoyed or disliked French as an academic subject
- Cultural interest: Whether participants wanted to consume art and media in French

- Attitudes to L2 community: Whether participants had positive associations toward French speakers

Participants were asked to respond to each statement using a seven-point Likert Scale to indicate whether they agreed or disagreed with the statement, and how strongly. In the Possible L2 Selves Questionnaire, participants were asked to what extent each statement applied to them now, described a possible future, described a possible future, whether it was a desired or undesired future, how likely they believed it to be, and how often they thought about it. Items were added to both motivational questionnaires to reflect the possibility that students' ideal L2 selves may have been related to different sociopolitical scales (all of France versus Paris in particular), and some of the wording was changed to include explicit references to the study abroad site. For example, "Friendships with French Canadians" from MacIntyre's (2009) questionnaire was replaced with both "Friendships with Parisian people" and "Friendships with French people."

For the AMTB, each of the seven sections was analyzed separately. To prepare for the data mixing within the themes, a particular focus was given to the questions pertaining to cultural interest and attitudes toward the L2 community. The average numerical score was calculated for the Likert scale students responded to on these questions.

For the Possible L2 Selves questionnaire, a particular focus was given to the questions pertaining to the *Ideal L2 Self* motivation. Following MacIntyre (2009), the total score was added for that aspect of motivation, and the difference was calculated between whether each statement represented a *current* or *future* self. Both of these values were kept separate, and the values of the before and after sessions were combined for the data mixing, both as aggregate scores between all students before and after study abroad and within students.

The results of the adapted AMTB and Possible Selves questionnaires were analyzed together, since they have been shown to be correlated (MacIntyre et al., 2009). The results of

the questionnaires were compared with extracted statements the students made in their interviews and focus groups to more fully understand the phenomenon and learn whether or not the students' questionnaire responses aligned with their statements in the interviews.

Ideology about and Contact with the Host Community

For this theme, the answers from the Possible Selves questionnaire that pertained to students' opinions about Paris in particular and France in general were extracted, adding their numerical Likert ratings for each session and finding the difference in ratings between sessions to see if there had been a change. As in the theme of proficiency, particular attention was given to students' living arrangements in Paris. These results were illustrated with quotes extracted from the transcripts of the individual and focus group interviews.

For this theme, first students' self-reported language contact time on the Language Contact Profile was compared with how they described their interactions with French speakers in their individual and focus group interviews. Particular attention was paid both to the reported quantity of interactions and to the quality of these interactions, e.g., whether these interactions were primarily superficial conversations with service personnel or included more complex topics. It was also noted whether students lived in student residences or with host families and it was calculated whether this factor correlated with their reported time and quality of spoken interaction with native speakers, both within each individual participant and across the sample group in aggregate.

Referring to the researcher's classroom observations, informal discussions with program faculty and staff, and ethnographic observations, it was possible to complement and explain some of the quantitative results and qualitative statements from the students by adding the perspective of program administrators.

Language Experience and Contact Questionnaires.

Before being able to draw conclusions about whether and to what extent the study abroad participants learned the French of the local target language community, as opposed to learning French in general, it was first necessary to confirm that they interacted with the target language community. It has been posited that students gain the most in proficiency when they have extensive and meaningful interactions in the target language with members of the host community (Isabelli-Garcia, 2006). It was also necessary to account for the possibility that language proficiency gains could be attributed to participants' previous exposure to other languages.

In order to explore these variables that could affect language gains, students answered language experience and contact questionnaires at the beginning and end of the study abroad program. Students' previous exposure to French and other languages, if applicable, were measured using a language questionnaire, adapted from the Language Experience and Proficiency Questionnaire (LEAP-Q) (Marian et al., 2007) and an adapted pretest and posttest version of the Language Contact Profile (LCP) (Freed et al., 2004) (Appendix C).

Some of the questions from the original LEAP-Q were omitted or changed, since the instrument was originally intended for use with speakers who were bilingual from childhood, while the current dissertation focuses instead on adult L2 learners, most of whom come from monolingual environments. For instance, Marian's (2007) LEAP-Q includes questions about the age at which the participant first started speaking, then started reading each language, while these participants all learned French in school and therefore began speaking and writing simultaneously. Similar questions were collapsed together for the sake of time. Although it relies on self-reporting, the LEAP-Q was found to be internally reliable and valid; items that intended to answer the same questions were strongly correlated with each other (Marian et al., 2007). The LEAP-Q also contained self-evaluation questions where

participants were asked to rate their own proficiency in reading, writing, speaking, and listening in each language they knew, and how strong they felt their accent was in French.

The LCP included questions about social interactions with native speakers, e.g., whom they spoke with in French and how much, before and during the study abroad program. This provided valuable information about the study abroad participants' degree of interactions in the community. Some questions were added to the LCP to get more specific information about language experience. For example, students were asked to list languages spoken at home when they were different ages. The LCP had different items in the versions administered before and after study abroad: the *before* version asked about previous life experience with language, while the *after* version contained questions specific to participants' interactions with native speakers and French-language media during study abroad. Completing the full language experience and contact questionnaire took participants approximately 10-15 minutes.

For the LCP, the total estimated hours per week that each student reported using French outside of class during the semester was added. Whether the students lived with a host family or in a student residence was also coded.

For the LEAP-Q, the analysis focused on the self-evaluations of language proficiency and level of foreign accent in French. Coding these self-evaluations as ordinal units, each student's before and after ratings were compared and the difference between each student's self-assessment scores from before and after study abroad was calculated, as well as the difference between the aggregate scores of the full sample.

Ethnography

Individual Interviews

As recommended by Dörnyei and Ushioda (2011), the adapted language experience and contact questionnaire was supplemented with semi-structured interviews with each participant at the beginning and end of the study abroad program. Another interview was added in the middle of the study abroad program as recommended by Isabelli-Garcia (2006). These interviews were intended to address RQ1b and RQ2a.

In order to situate students in the local target language community, part of the investigation intended to elicit from students their views on the type of French speaker they wished to become, both in general and in relation to their study abroad experience in Paris. The hypothesis tested by these interviews was that, if convergent *selves* emerged from the interview transcriptions, a collective ideal L2 self among the group of learners may be conceptualized as a figure of personhood (Agha, 2005; Koven, 2015).

Isabelli-Garcia's (2006) qualitative approach was adopted with participant interviews rather than diaries. In the interest of not overwhelming the students with regular homework, as with diaries, they were interviewed in person in the middle of the program. Open-ended interview questions were created by drawing on the three themes of the dissertation: L2 proficiency, L2 identity and motivation, and ideology about and contact with the host community (Appendix D). If participants touched on one of the guiding themes or said something unclear, they were asked clarifying and follow-up questions. The interview questions between the three phases differed primarily in verb tense to reflect the students' situations at the time of each interview.

Interviews were conducted one-on-one during the experimental sessions before and after study abroad, and as separate sessions during study abroad. They were audio-recorded for transcription and analysis. Interviews took around 15 minutes each. The interviews were

examined for instances in which participants addressed their own contact with and ideologies about the host community. Relevant quotes were extracted primarily from answers to the questions, “Why did you decide to study abroad in Paris?” and “What [will it be/is it/was it] like living with Parisians?” This discourse was used primarily to illustrate and explain the findings of the questionnaires. Where many students described convergent conceptions of the prototypical Parisian, it was suspected that they had been influenced by shared learning experiences, including cultural backgrounds and marketing by the language learning industry.

Observations and Focus Group Interviews (During Program)

In April of 2015, the researcher traveled to Paris near the halfway point of the study abroad program under investigation to enrich understanding of the students’ experience of the program. This element of the study was intended to address RQ1b and RQ2a. While on site, the researcher observed multiple class sessions that the students attended, had informal discussions with faculty and staff of the study abroad program and with the participants, and conducted interviews with two focus groups. For the classroom observations and informal discussions with faculty and staff, the researcher obtained verbal consent to take notes.

The purpose of the observations was to gain a more holistic ethnographic understanding of the participants’ study abroad experience and to focus on the discourses specific to language learning and identity in Paris that participants and faculty were exposed to. Observations included elements such as students’ behavior in class and the type of feedback students were given on their oral communication. Information that was offered during the discussions with colleagues included their perception of students’ efforts at integration into life in Paris.

Two focus group interviews were conducted with groups of three students each. The first group included Gaston, Gordon, and Jaynie, and the second group included Amy,

George, and Cady. These focus group interviews were structured as informal discussions where the researcher guided the conversation with the same questions as in the individual interviews and also more general questions about participants' experiences in Paris. As opposed to the individual interviews, and knowing that identities were constructed in interaction (Goffman, 1959), these interviews were interpreted as representations of the views of the group as a collective rather than as strictly representing each individual participant.

For the most part, the students compared experiences amongst themselves and spoke with minimal prompting from the researcher. The focus group interviews were conducted in public and audio recorded for detailed transcription and analysis. The researcher paid particular attention to threads of conversation that related to the themes of the study, trying to reconstruct their ideas of the figure of personhood of a Parisian and of a study abroad student in Paris. The analysis of the focus group interviews took into account that there could be group effects in the participants' responses, which is why this observation was treated separately from the individual interviews. By including interviews in the middle of the program in addition to the beginning and end, it was possible to obtain information about participants' host community attitudes and their involvement at three different points in the program.

The observations and informal discussions with study abroad professionals were used to set the scene in the description of the study abroad program and to explain or enrich the findings of other components of the study. For example, students reported that they spent a lot of time communicating in English with friends back home, and several of them were observed browsing Facebook during class, which corroborates their statements. In addition, the faculty and the students spoke about the same events from slightly different perspectives, giving a fuller picture of life in the program.

Research Questions

Here, we return to the research questions to make necessary inferences. RQ1a asks whether students acquired the nasal vowel perception patterns of their host community. This was addressed by the comparison between the control group's accuracy on the NMF stimuli in the nasal vowel perception experiment and that of the participants.

RQ1b asks what students' beliefs were about the local community and its language, and how these affected (if at all) their motivation to improve the proficiency and accuracy of their spoken French. The first part of this question was answered by the themes of L2 identity and motivation, and ideology about the host community. In tandem with participants' statements in the qualitative portions of the study, these revealed commonalities among the participants. The second part of RQ1b was addressed by comparing the quantitative ideology and identity metrics with the motivational metrics. This was further informed and illustrated by the qualitative inquiry.

There were two research questions that concerned learner factors. RQ2a asked whether study abroad students with a strong integrative motivation or ideal L2 self motivation towards the local community would acquire the dialect-specific nasal vowel perception patterns more accurately than students with lower integrative or ideal self-motivation studying in the same environment. This question was addressed by finding inter-item Pearson correlations between quantitative metrics of integrative and ideal self motivations and nasal vowel perception accuracy. These quantitative results were illustrated and further explained by the results of the qualitative elements of research.

Finally, RQ2b asked what other factors (such as proficiency or contact with native speakers) affected the acquisition of local nasal vowel perception. As for RQ1b and RQ2a, an inter-item Pearson correlation was performed, comparing nativelike nasal vowel perception

accuracy and proficiency scores, housing type, and language contact hours. Other themes that emerged from the qualitative data were considered in addressing this question.

CHAPTER 4: RESULTS

Introduction

This chapter will be organized according to themes introduced in the previous chapters. First, the results of each theme will be discussed. Second, the results of the mixed themes will be discussed. Examples from the interviews and observations will be included throughout to illustrate and inform the interpretation of the quantitative results.

A version of the following guiding chart (Table 1) will appear at the beginning of each section. This chart is meant to assist the reader in understanding how each element of the study is meant to fit in to the whole, according to the research questions.

Table 1. Research questions and instruments

Instruments addressing each research question		
Research Questions	**Instruments**	**Progress**
Social Factors		
RQ1a. Will study abroad students learning French accommodate to ambient speech patterns during their study abroad program and acquire the nasal vowel perception patterns of the dialect of their host community in Paris?	Nasal vowel perception experiment	
RQ1b. What are students' beliefs about the local community and its language? How do these affect (if at all) their motivation to improve the proficiency and accuracy of their spoken French?	Attitude/Motivation Test Battery	
	Ideal L2 Selves Questionnaire	
	Interviews	
Learner Factors		
RQ2a. Will study abroad students with a strong *ideal self* motivation towards the local community acquire the dialect-specific nasal vowel perception patterns more accurately than students with lower integrative or ideal self-motivation studying in the same environment?	Attitude/Motivation Test Battery	
	Ideal L2 Selves Questionnaire	
	Nasal vowel perception experiment	
RQ2b. What other factors (such as proficiency or contact with native speakers) affect the acquisition of nasal vowel perception?	Cloze Test	
	Elicited Imitation Test	
	Language Contact Profile	
	Observations	

Proficiency

The theme of proficiency was meant to address RQ1a, RQ2a, and RQ2b (Table 2). Here, proficiency included the traditional modalities of reading, writing, listening, and speaking. It also included the fine-grained measurement that formed the nucleus of the study: local, nativelike nasal vowel perception.

Table 2. Research questions and instruments for proficiency theme

Instruments addressing each research question		
Research Questions	**Instruments**	**Progress**
Social Factors		
RQ1a. Will study abroad students learning French accommodate to ambient speech patterns during their study abroad program and acquire the nasal vowel perception patterns of the dialect of their host community in Paris?	Nasal vowel perception experiment	←
RQ1b. What are students' beliefs about the local community and its language? How do these affect (if at all) their motivation to improve the proficiency and accuracy of their spoken French?	Attitude/Motivation Test Battery	
	Ideal L2 Selves Questionnaire	
	Interviews	
Learner Factors		
RQ2a. Will study abroad students with a strong *ideal self* motivation towards the local community acquire the dialect-specific nasal vowel perception patterns more accurately than students with lower integrative or ideal self-motivation studying in the same environment?	Attitude/Motivation Test Battery	
	Ideal L2 Selves Questionnaire	
	Nasal vowel perception experiment	←
RQ2b. What other factors (such as proficiency or contact with native speakers) affect the acquisition of nasal vowel perception?	Cloze Test	←
	Elicited Imitation Test	←
	Language Contact Profile	
	Observations	

Nasal Vowel Perception Experiment (Before/After Program)

Participants' average accuracy rates for each Parisian nasal vowel target/competitor pair were compared to those of 39 native speakers from Paris. The Quebec nasal vowel stimuli in the experiment were excluded as they were not relevant to the construct under examination. First, the differences between native speaker and learner accuracy rates were calculated for each participant both before and after study abroad. This provided a metric for how different each participants' perception was from that of a native speaker. Then, the difference between these differences was calculated to determine whether and to what extent the participants' perception of nasal vowels became more or less nativelike after study abroad.

Participant perception compared to native speakers

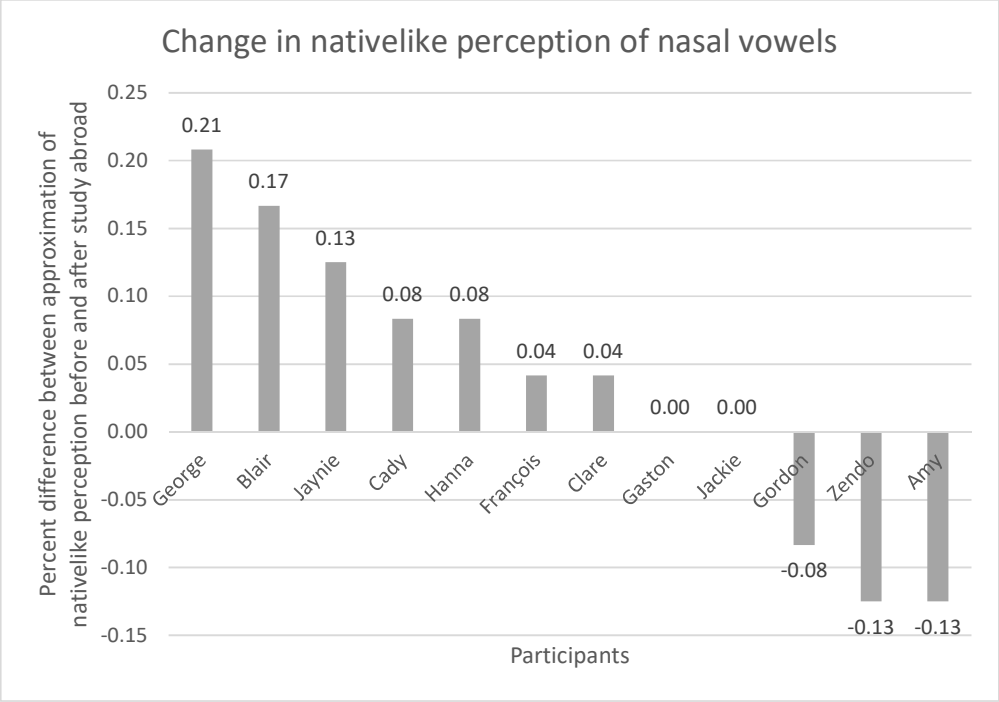
Participants showed variation in how closely their nasal vowel perception accuracy mimicked that of native speakers, with most becoming more nativelike after study abroad. Most dramatically, George improved his nativelike perception by 21%. Jaynie was even more accurate than native speakers after study abroad, which affirms that it was prudent to compare study abroad participants to the native speaker control group rather than only judging them based on raw accuracy.

Participant perception before and after study abroad

The nucleus of the study was the difference between how nativelike participants' nasal vowel perception was before and after study abroad, quantified by how many percentage points away participants' average accuracy was from the native speaker averages. A positive number indicates that participants' nasal vowel perception accuracy approached that of the native speakers, and a negative number indicates that their nasal vowel perception accuracy became less nativelike. Two participants (Jackie and Gaston) did not change at all in their accuracy. Three participants (Zendo, Gordon, and Amy) became less nativelike in

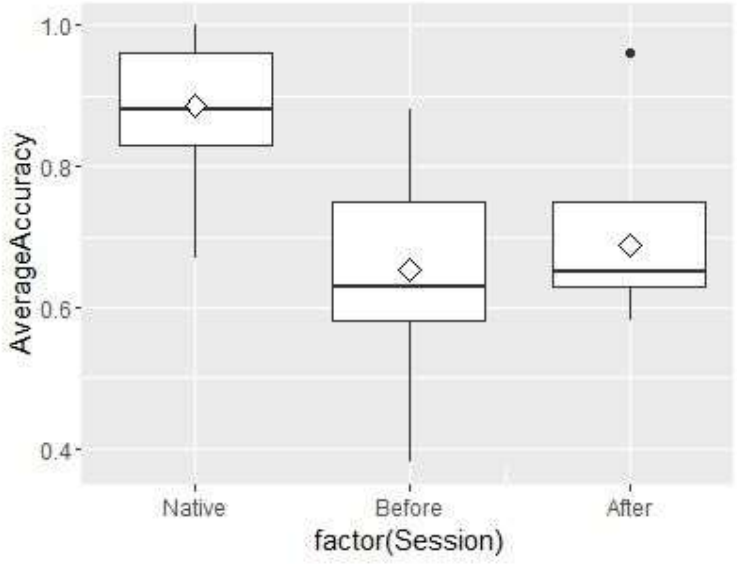
their accuracy. Zendo and Amy were also speakers of Hindi, which contains nasal vowels and may have contributed to their vowel perception. The other seven participants became more nativelike in their accuracy (Figure 2).

Figure 2. Whether and to what extent participants' nasal vowel perception became more nativelike



The native speakers had an average accuracy rate of 86%, with a standard deviation of 0.32 (N=936). The study abroad learners had an average accuracy rate of 65% prior to study abroad, with a standard deviation of 0.48 (N=288), and an average accuracy rate of 69% after study abroad, with a standard deviation of 0.46 (N=288) (Figure 3). This broad spread of accuracy rates belies the considerable variation between participants and between the results of the different vowel pairs.

Figure 3. Distribution of average accuracy rates identifying Parisian nasal vowels for native speakers, learners before study abroad, and learners after study abroad. The boxes show the 25th-75% percentile range, the horizontal lines show the median, and the diamonds show the mean. (The outlier in the "After" group is Jaynie.)

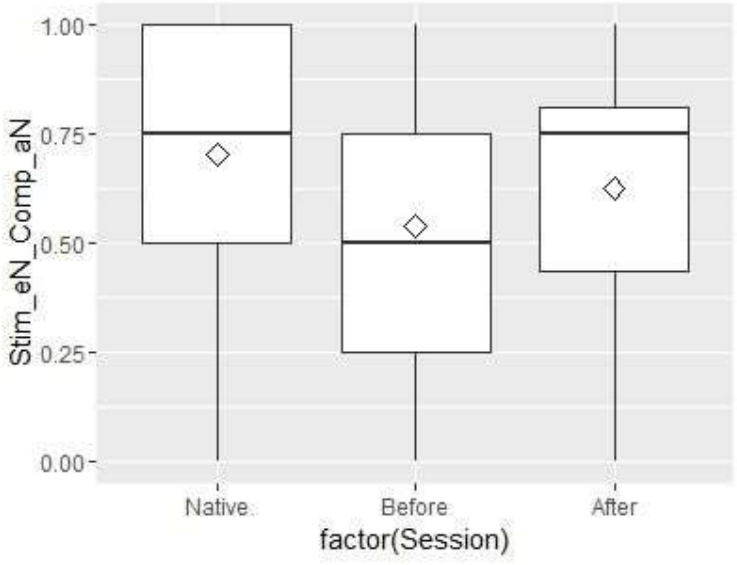


Participants' perception by vowel pair

For a more detailed comparison, the learners' accuracy rates were compared to those of the native speakers for the two variable vowel pairs that are adjacent and subject to neutralization in the rotating vowel space: the stimulus /ɛ̃/ with the competitor /ɑ̃/, and the stimulus /ɑ̃/ with the competitor /ɔ̃/. Nicholas et al. (2014b) reported an age effect in the accuracy rates for these rotating vowel pairs, with younger native speakers displaying a higher accuracy rate than older native speakers, suggesting a change in progress. This helps to explain why the native speakers were not categorical in their identification of these particular vowels and why the standard deviations are so large.

When participants heard the vowel (stimulus) /ɛ̃/ and also had the option to identify it as the vowel (competitor) /ɑ̃/, native speakers were accurate on average 71% of the time (SD=0.46, N=156). The learners were accurate on average 54% of the time prior to study abroad (SD=0.5, N=48), improving to an average of 63% of the time after study abroad (SD=0.49, N=48) (Figure 4).

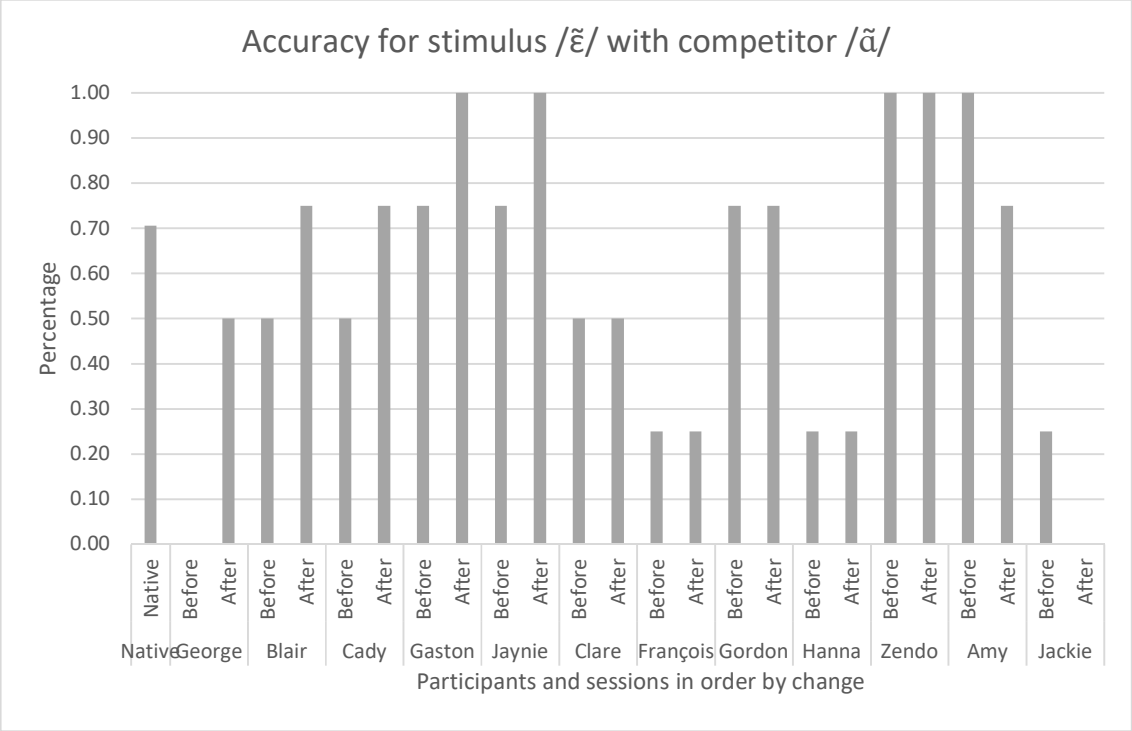
Figure 4. The distribution of accuracy in identifying the vowel /ɛ̃/ when the competitor vowel was /ɑ̃/. (The boxes show the 25th-75% percentile range, the horizontal lines show the median, and the diamonds show the mean.)



It is pertinent to keep in mind the substantial limitations to what inferences can be made from a breakdown by stimulus/competitor vowel pairs for each individual participant. Each study abroad participant encountered each vowel pair only four times per session. Thus, this level of detail can posit general tendencies in students' learning, but it cannot be interpreted with any statistical certainty.

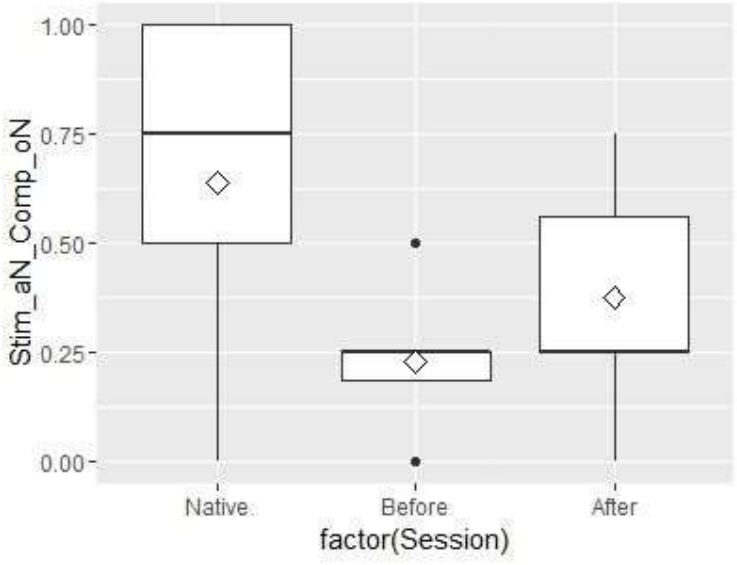
For the vowel pair where participants heard the vowel (stimulus) /ɛ̃/ and were given the option to identify is as the vowel (competitor) /ɑ̃/, five participants improved in the accuracy after study abroad, five showed no change in accuracy, and two (Amy and Jackie) decreased in accuracy (Figure 5).

Figure 5. Accuracy for stimulus /ɛ̃/ with competitor /ɑ̃/ before and after study abroad



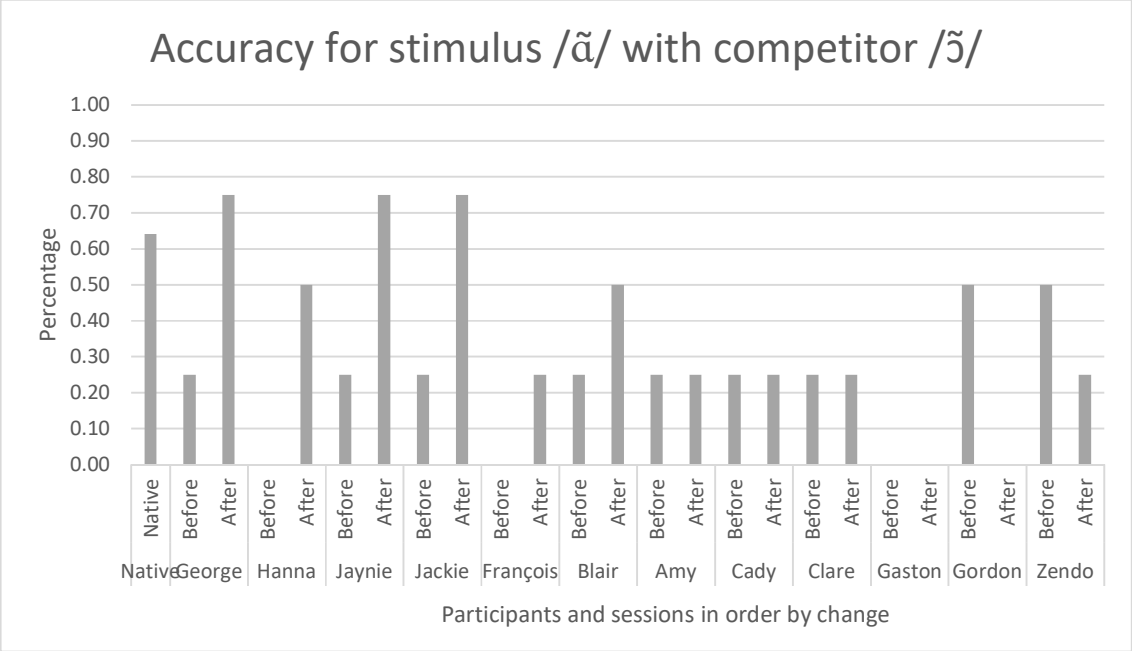
When participants heard the vowel (stimulus) / ɑ̃ / and also had the option to identify it as the vowel (competitor) /ɔ̃/, native speakers were accurate on average 64% of the time (SD=0.48, N=156). The learners were accurate on average 29% of the time prior to study abroad (SD=0.42, N=48), improving to an average of 38% of the time after study abroad (SD=0.49, N=48) (Figure 6). The outliers in the "before" category were Zendo and Gordon with 50% accuracy, and Hanna, Gaston, and François with 0% accuracy.

Figure 6. The distribution of accuracy in identifying the vowel /ɑ̃/ when the competitor vowel was /ɔ̃/. (The boxes show the 25th-75% percentile range, the horizontal lines show the median, and the diamonds show the mean.)



For the stimulus /ɑ̃/ and competitor /ɔ̃/ vowel pair, six participants improved in their accuracy after study abroad. Four displayed no change in accuracy, and two (Gordon and Zendo) decreased in accuracy (Figure 7).

Figure 7. Accuracy for stimulus /ɑ̃/ with competitor /ɔ̃/ before and after study abroad



As shown above, participants varied considerably in how accurately they perceived the locally-specific nasal vowel patterns of their Parisian host community, both in the aggregate and for the specific vowel pairs that are subject to neutralization because of the rotation of their articulation in the vowel space. As will be shown later, improvements in nativelike accuracy tended to correlate with other social and learner-specific factors.

Proficiency tests

Participants Gaston, Jaynie, and Amy were already out of the state at the beginning of the study and were not available for the in-person and computerized components of the study. Therefore, they were given the computerized parts of their pretests and interviews while they were in Paris. Their results on the perception experiment, EIT, and pre-departure interview thus represent any possible changes between the middle of the semester and the end, rather than between the beginning and the end. They submitted the written questionnaires and cloze tests via mail or email prior to leaving for Paris, so all other components of the study do reflect true pre and post measurements.

Results of Elicited Imitation Test

As specified by Gaillard (2014), each sentence produced by the learners was graded for six different elements: meaning, syntax, morphology, vocabulary, pronunciation, and fluency. Each category was graded on a scale of 0 to 6, with a maximum of 36 points per item. The resulting score yielded a global proficiency score as well scores for each category. Then, some of the statistical analyses recommended by Fulcher (2010)were performed, with modifications because the scores were ordinal rather than binary so it was not possible to use Cohen's kappa for inter-rater reliability.

Participants and raters

There were 15 total students whose EIT scores were rated at the same time by the same group of raters. Although only 12 students are the subjects of this dissertation, the reliability of this instrument was calculated based on the results of 15 students who took the same test: the 12 students who studied for a semester in Paris, and an additional three students who studied in a one-month summer program in Arles, in southern France, who were included in a separate pilot test. The Paris students took the EIT before and after their semester in Paris, while the Arles students took the EIT before and after their month in Arles. Although only the analysis of the individual scores of the 12 semester-long students will be examined here, results from all 15 students are included in this section for the purpose of evaluating the EIT as an instrument.

Each test was evaluated by two raters. There were five raters total, four of whom are native speakers of French who are working toward either a Master's or Ph.D. in French, and one of whom is a near-native L2 speaker of French with a completed Ph.D. in French and experience in language testing. Each rater evaluated the before and after tests of six participants, or 12 exams total. The tests were counterbalanced in such a way that each rater

evaluated the same test as each of the other raters so that their scores could be compared for inter-rater reliability.

Raters were provided with a detailed rubric for each of the six categories: meaning, syntax, morphology, vocabulary, pronunciation, and fluency. They were each given a short training, which included a detailed reading and explanation of each of the rubrics and a collaborative rating of sample items. An example of one of these rubrics (here, for pronunciation) is included as Figure 8, below. The rubrics for all six categories are included in Appendix D.

Figure 8. Rubric for pronunciation rating

SCORE	6	5	4	3	2	1	0
PRONUNCIATION (French sound system) *Reminder : Take into consideration the articulation of vowels (oral and nasal), consonants, mandatory liaisons, and the degree of understanding linked to all of this.*	This oral production is **perfectly intelligible** and perfectly copied from the original sentence **without any prosodic[1] or segmental[2] mistake.**	This oral production contains **prosodic and/or segmental elements** copied from the original sentence. There is **only one/ two*mistake(s).** *Clearly intelligible. does not hinder comprehension despite small articulatory errorz or hesitation (E.g.: final consonants articulated)* Ex : La police a arrêté le terrible voleur qui était grande et mince Ex : Le petit garçon dont le ~~chaton~~ **château** est mort hier est triste.	This oral production contains **some of the prosodic and/or segmental elements** more or less copied from the original sentence. ***More than the half of the elements are employed.*** Ex : Avant ~~de pouvoir~~ d'aller dehors, il doit ~~finir de~~ ranger sa chambre. Ex : Le petit petite garçon ~~dont~~ **dans** le ~~chaton~~ **château** est mort hier est triste. Ex2 : Prenons deux semaines pour visiter ~~New~~ **nouva** York ~~pendant les vacances~~ cet été.	This oral production contains **more than two* pro-sodic and/or segmental elements** more or less copied from the original sentence. *In the best case, half of the elements is present.* Ex : Le ~~petit~~ petite garçon ~~dont~~ **dans** le ~~chaton~~ **château** ~~est mort hier~~ est triste. Ex : Traversez ~~traverse~~ la rue ~~en~~ ~~au~~ feu ~~et puis continue tout droit~~. *Several difficulties concerning the sentence understanding.*	This oral production contains **only one/ two* pro-sodic and/or segmental elements** more or less copied from the initial sentence. *A lot of difficulty understanding the sentence. The repeated words are difficult to understand, due to poor phonemic articulation.* Ex : ~~Traverse~~ la ~~rue~~ **roue** ~~au feu et puis continue tout droit~~ **à** droite roue [u] ≠ la rue [y] droite ≠ droit	This oral production **is not understandable** *The articulated phonemes **do not correspond** to the French phonological system **at all.*** Ex : **Lo** rouche	The learner did not say anything OR started to repeat the sentence before the beep.

Analysis of the instrument.

Thirty individual tests were evaluated, each twice, with a resulting N=60. The lowest score on the test (converted to percentages) was 41% and the highest was 94%. The mean was 65%, with a standard deviation of 14%.

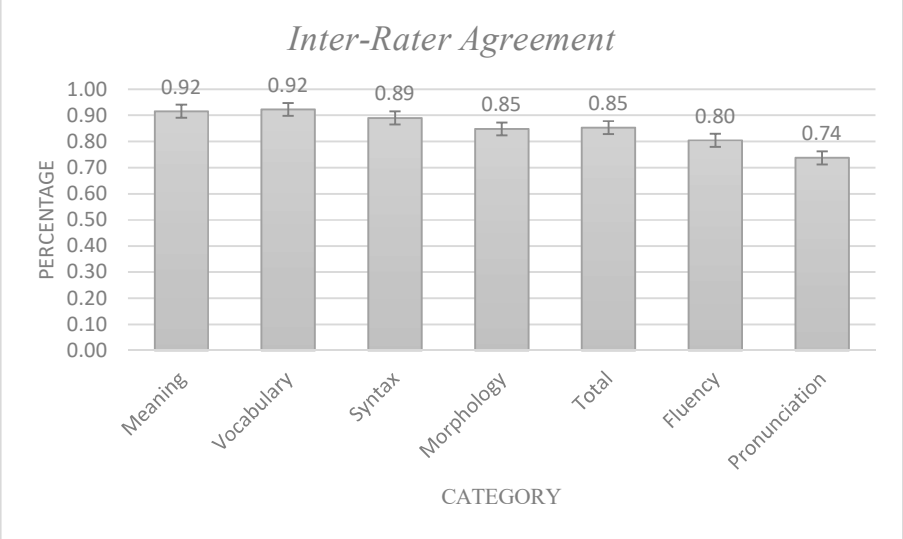
Inter-rater reliability

Including adjacent agreement (for example, if one rater picked 3 in one category and the other picked 4 in the same category), raters agreed in 85% of cases. The unexpectedly low rater agreement can be explained in part by an error in interpreting the rating instructions. In the training, the raters were explicitly told to disregard a comment on the rating sheet that says to assign a score of zero if the student started the recording before the beep. Because of the experimental software that was used, there is no way to tell for sure whether the student started speaking before the beep or merely decided to repeat the sentence beginning in the

middle (for example, if he or she forgot the beginning of the sentence). Two raters disregarded these instructions, assigning a zero for several items because the students' recordings started in the middle of a sentence.

Another potential cause for the lower level of inter-rater reliability was the clarity of the rubrics of one category in particular: pronunciation. This category had the lowest level of inter-rater agreement. Multiple elements were included in the category of pronunciation, such as prosody and vowel quality. Depending on which aspect of pronunciation the rater was more attuned to, there could plausibly be conflicting choices between scores. Two of the raters had training and coursework in phonetics and phonology, while the other three did not, so the technical terms on the rubric (e.g. "phoneme") may have been interpreted differently by the different raters (Figure 9).

Figure 9. Inter-rater agreement by category



Results by category

The scores in all categories were significantly, positively correlated with the overall scores on the EIT, meaning that they each discriminated to some extent between proficiency levels. Interestingly, the pronunciation category both received the highest average score and

the lowest Pearson correlation with the total score (Table 3). This could relate to the difficulty in grading this particular category, as mentioned above.

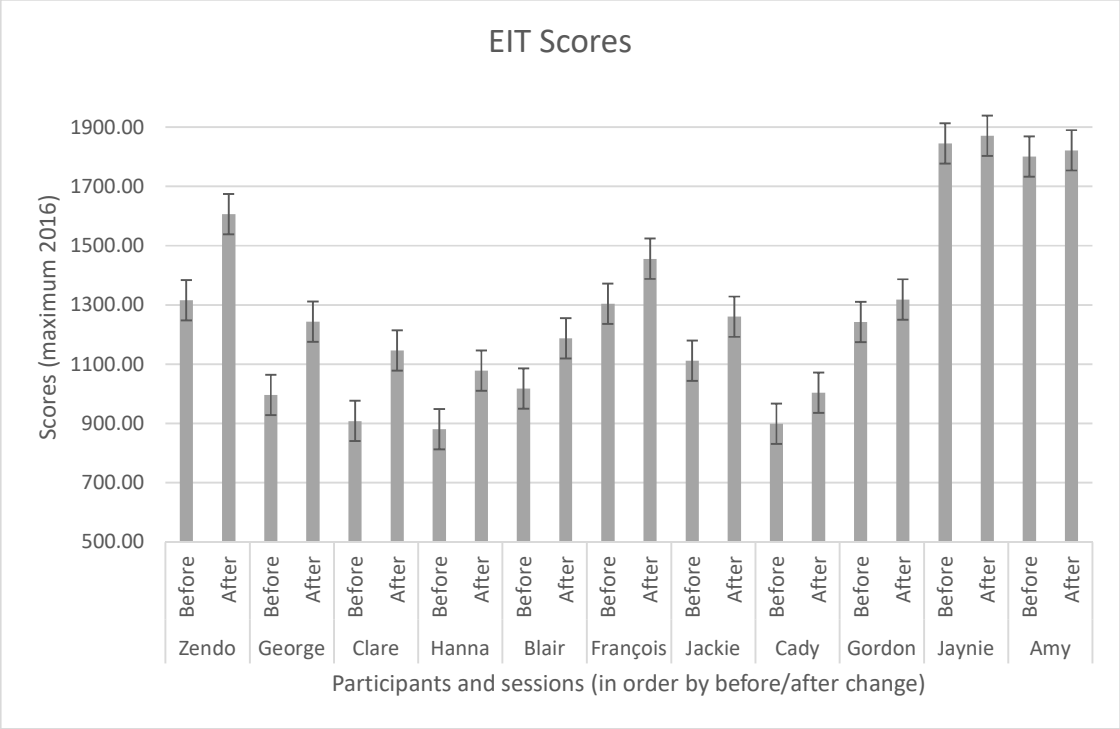
Table 3. Category difficulty and category-total correlation

Category Difficulty and Category-Total Correlation			
Category Difficulty		**Category-Total Pearson Correlation**	
Category	**Average Accuracy**	**Category**	**Correlation to total**
Morphology	0.63	Pronunciation	.886**
Meaning	0.64	Fluency	.932**
Vocabulary	0.64	Morphology	.953**
Syntax	0.64	Vocabulary	.959**
Total	0.65	Meaning	.961**
Fluency	0.65	Syntax	.962**
Pronunciation	0.69		
Note. ** indicates that correlation is significant at the 0.01 level (2-tailed).			

Results for Paris semester students before and after study abroad

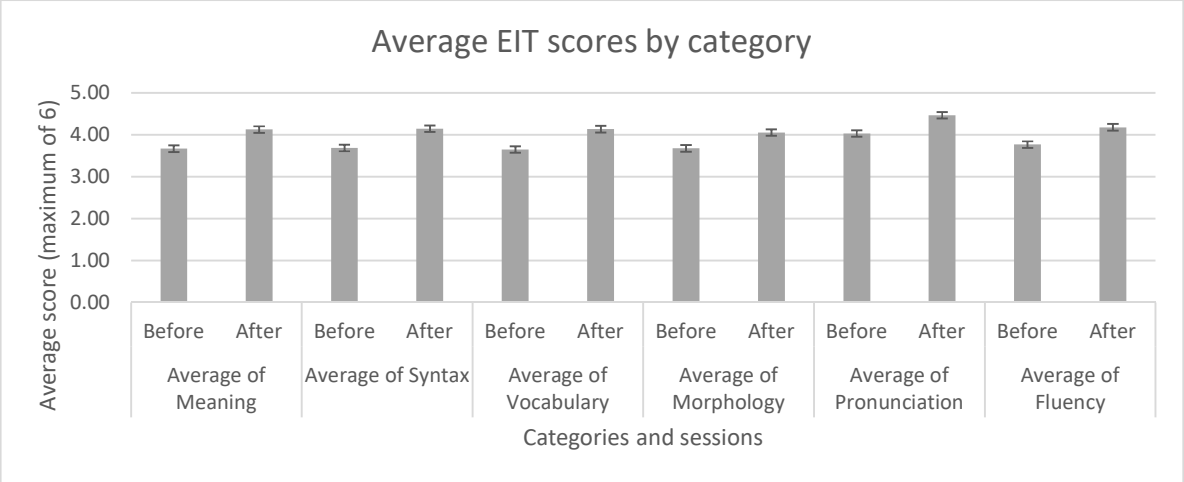
The analysis of participant scores will include only the 12 Paris study abroad students. All participants but one increased their overall scores between the pre- and post-tests (Figure 10). However, this outlier was likely due to the fact that participant Gaston did his EIT twice at the first time point because the Paradigm experimental software failed to record sound the first time. The higher initial score is very likely due to the additional practice this afforded him. His EIT scores were omitted from the following analyses. In the case of participants Jaynie and Amy, their initial scores were so high that this could represent a ceiling effect. As mentioned previously, these two participants had also spent several weeks in Paris at the time of their participation in this phase of the study, so they had recent and current daily exposure to the language.

Figure 10. Scores by participant before and after study abroad



Excluding Gaston, the average score before study abroad was 1211 out of 2016, which increased to 1363 after study abroad. Due to the low number of participants, it was not possible to use inferential statistics to find whether this difference between sessions was statistically significant. The range of scores decreased after study abroad (from 964.5 to 867) as the minimum score increased from 881 to 1004 and the median increased along with it (1112.5 to 1260.5). The highest score did not greatly increase between the two sessions, going from 1845.5 to 1871, which might represent a ceiling effect for this group's experience level. The participants increased as a group in their speaking and listening proficiency, but none of their scores approach the maximum score of 2016. The general increase was also reflected in an increased score between the two sessions in every category of the test (Figure 11).

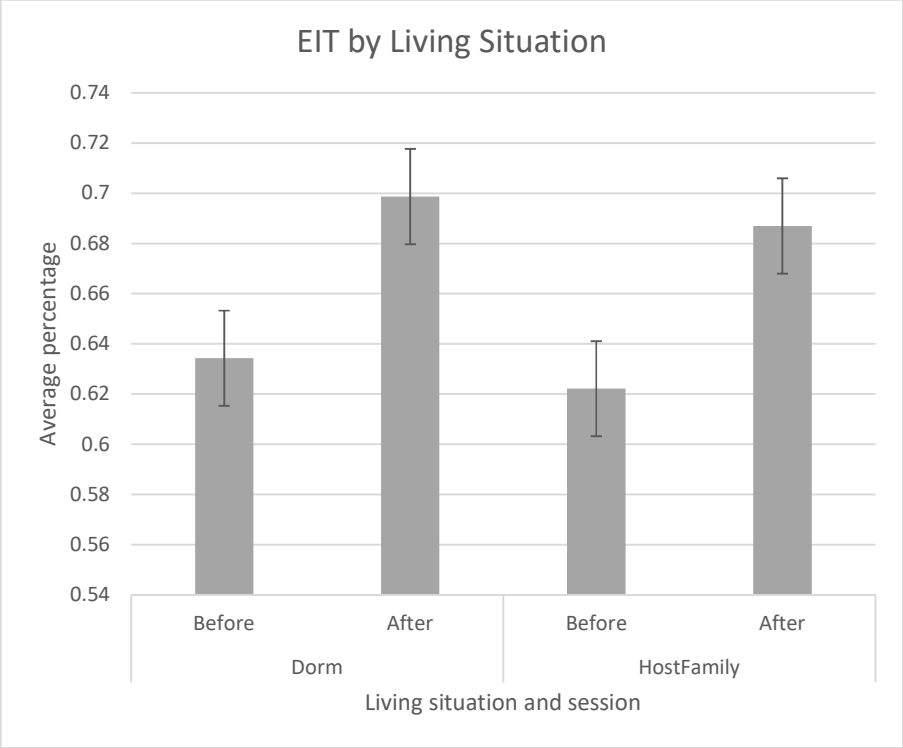
Figure 11. Average scores per category before and after study abroad



EIT scores by living situation

Participants' EIT scores (for speaking and listening proficiency) did not vary substantially depending on whether they lived in a host family or in a dormitory (Figure 12). However, those who lived with host families did report in their interviews and on the Language Contact Profile that they had had more opportunities to speak French.

Figure 12. Average EIT scores by living situation before and after study abroad



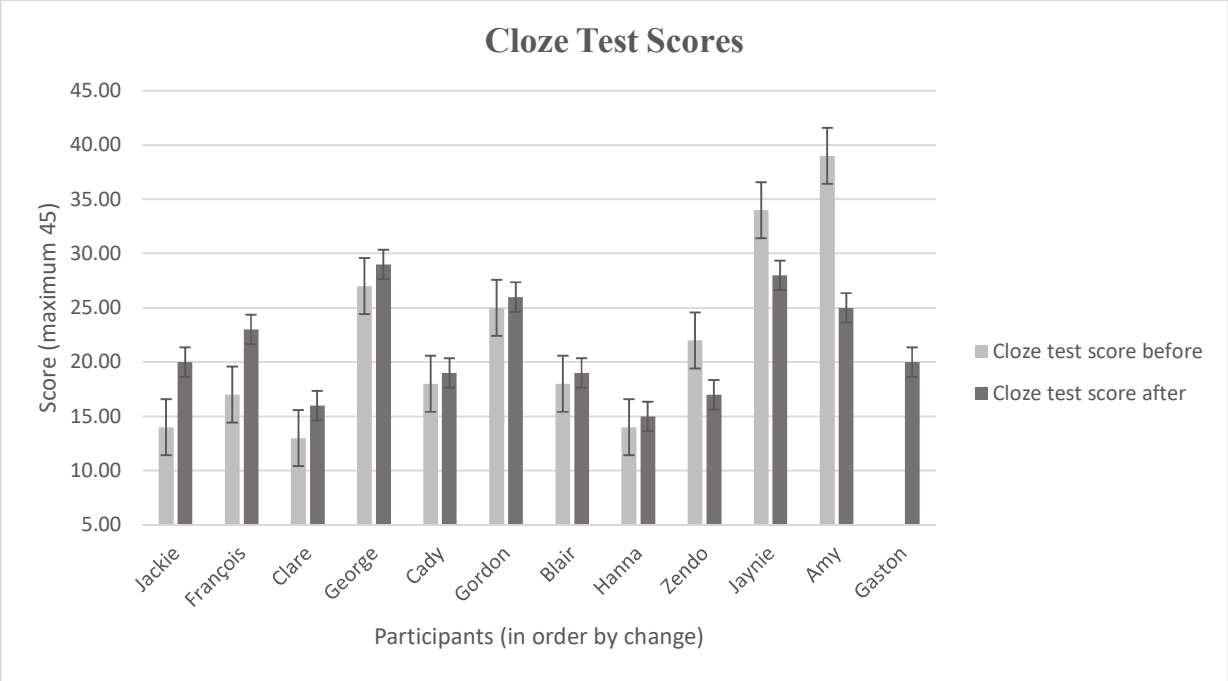
Results of Cloze Test

The cloze test for reading and writing proficiency was graded on a scale of 0-45. Each blank in the article was worth one point, and no partial credit was given. Gaston did not submit a pre-departure cloze test. Unexpectedly, student scores were inconsistent, with the average score decreasing after study abroad, from 21.9 to 21.4. The median scores increased from 18 to 20, and the range of scores decreased from 26 to 14, since most students did improve somewhat. The decreased mean could be explained by a few participants with high scores before study abroad whose scores dropped, with a maximum score of 39 prior to the program and only 29 after the program. Two of the three students whose reading and writing proficiency scores decreased had also stayed in dormitories.

The differences in cloze test scores before and after study abroad could not be analyzed using inferential statistics because of the low number of participants. The raw score

for most students did increase after study abroad, with the decreased average being led by a few individuals with large decreases in their scores (Figure 13).

Figure 13. Cloze test scores before and after study abroad



Comparison of EIT and cloze scores.

The inconsistency between the scores on the Elicited Imitation Test (for speaking and listening) and the cloze test (for reading and writing) show that the study abroad experience did improve competencies in the oral modalities of French, but did not improve text-based modalities across the board. This could indicate that some participants placed more emphasis on intelligibility than accuracy after spending time in Paris. Since none of these participants took explicit grammar courses, this can be interpreted as a demonstration that written accuracy was less of a focus during the sojourn than accuracy in speaking and listening. Thus, students returning from study abroad may benefit from grammar and spelling reviews.

Results of Self-Ratings

As part of the Language Experience and Proficiency Questionnaire (LEAP-Q), participants were asked to rate their own proficiency for each nonnative language they spoke for the modalities of reading, writing, listening, and speaking. This self-assessment was repeated before and after study abroad. Two participants did not rate their own abilities in French in the measurement before study abroad, but all participants rated their French after study abroad. The ratings were categorical with four check boxes: *Beginner*, *Intermediate*, *Advanced*, and *Near-Native*. For all four categories, the largest number of self-ratings moved from *Intermediate* to *Advanced* after study abroad (Figures 14-17). These impressionistic, self-reported ratings are unrelated to the ACTFL guidelines for oral proficiency although the same terminology is used.

The reading category had the highest number of students self-assessing as *Near-Native,* which is consistent with participants' reports that all of them took literature classes that required intensive reading assignments. For both listening and writing, one student who initially had self-assessed as *Near-Native* prior to studying in Paris changed that rating to a different level after study abroad, perhaps realizing that these tasks were more difficult "in the wild" than anticipated.

Overall, the increase in self-assessed listening and speaking scores is consistent with the increased scores on the EIT. Considering that the cloze test scores did not improve as dramatically for the reading and writing modalities as the participants' self-assessments, this could either indicate that students are inaccurate in assessing themselves or, more likely, that the elements of the reading and writing experience that participants focused on were outside the constructs measured by the test. For example, in the interviews, participants reported that they were able to read more quickly after study abroad.

Figure 14. Self-ratings for listening

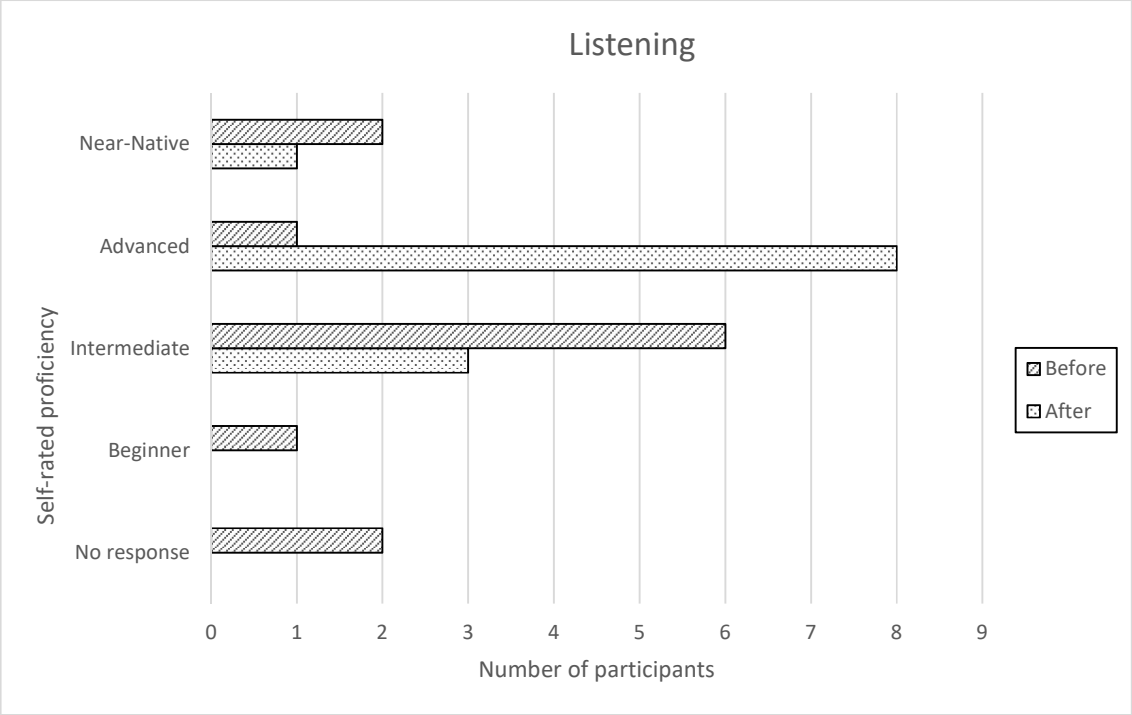


Figure 15. Self-ratings for speaking

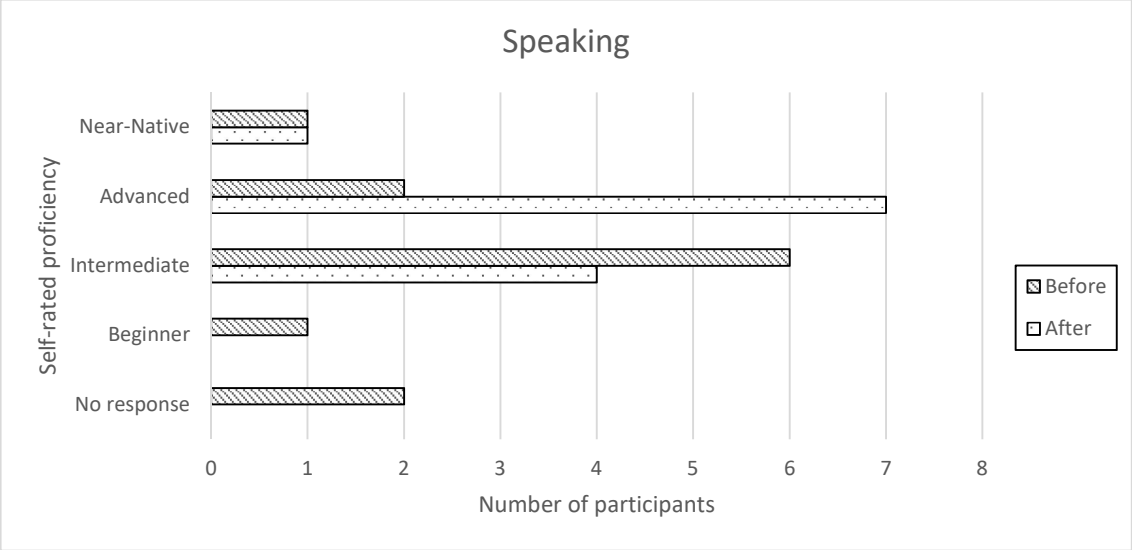


Figure 16. Self-ratings for reading

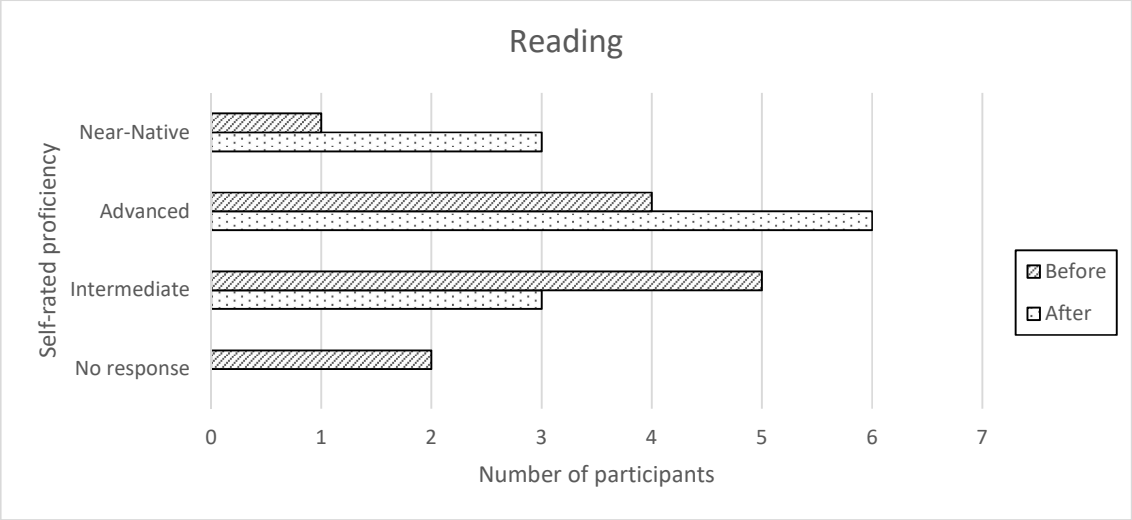
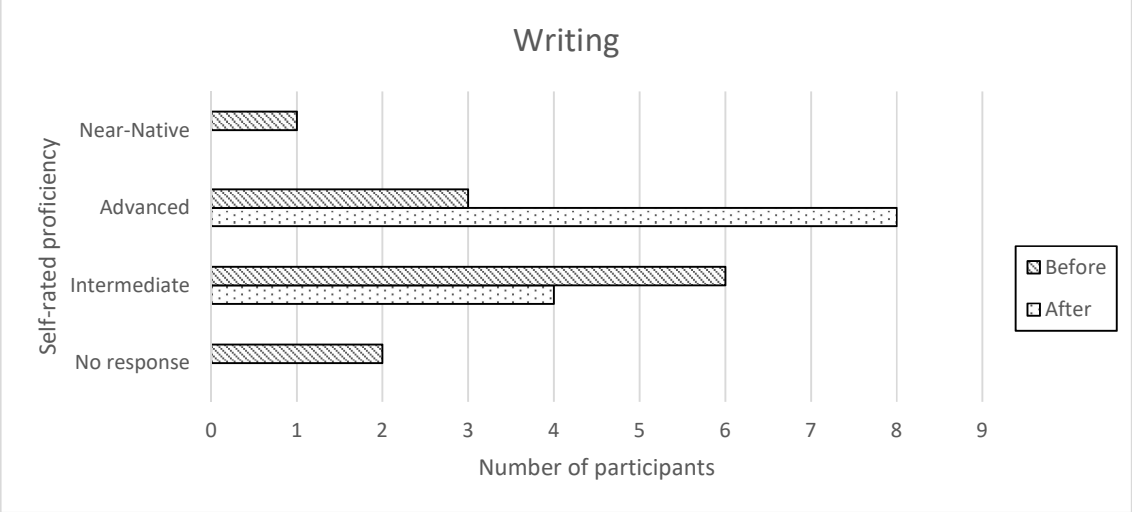


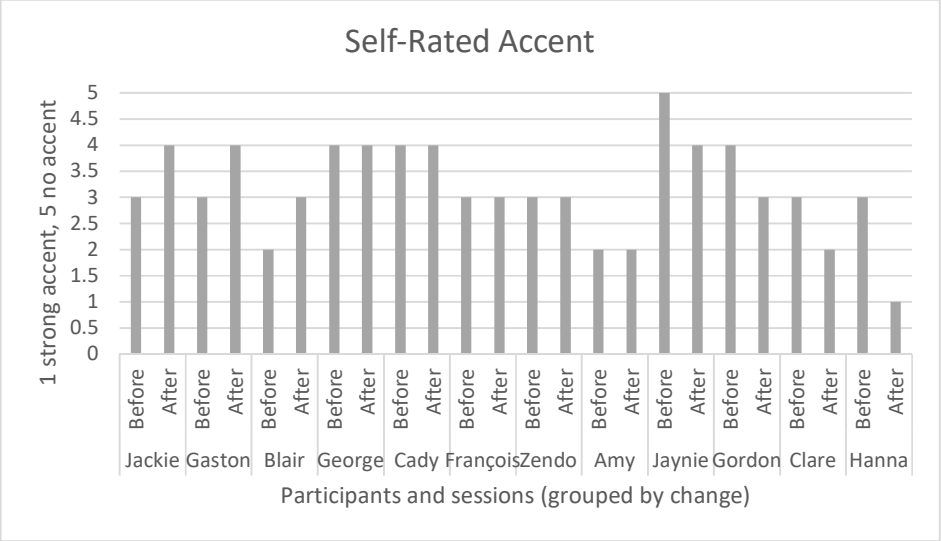
Figure 17. Self-ratings for writing



Self-rating of accent

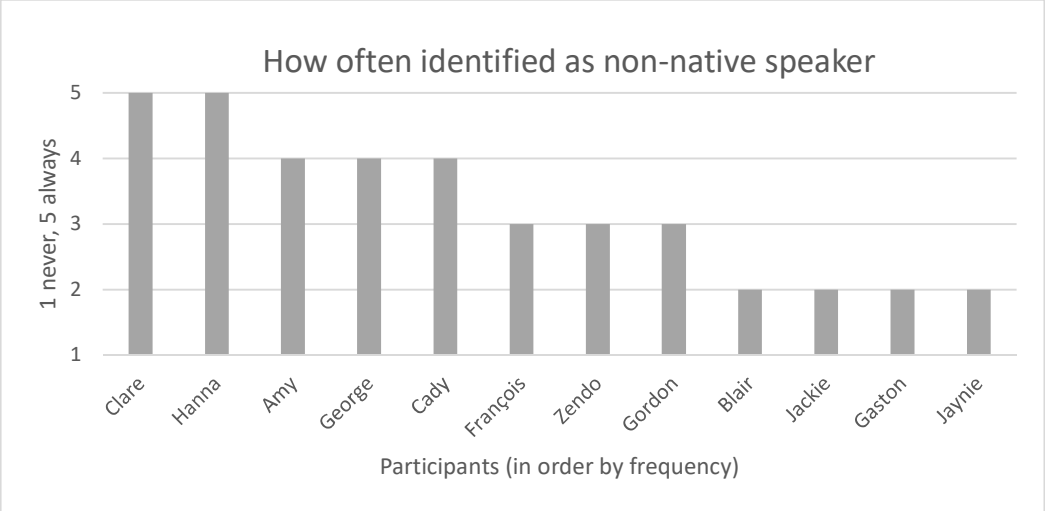
Participants were asked to rate their own accents in French both before and after study abroad on a Likert scale from 1 to 5, with 1 meaning they had a strong accent in French and 5 meaning they had no noticeable accent in French. The changes in these ratings showed no overall discernable pattern, with some participants giving themselves the same rating before and after, while others gave themselves higher or lower ratings (Figure 18).

Figure 18. Self-rated accent by participant



As a follow-up question to the self-rated accentedness of their spoken French, participants were asked how frequently they were identified as non-native speakers during their time in Paris. This question was only included as part of the questionnaire for after study abroad. Ratings were on a Likert scale of 1 (never or almost never identified as a non-native speaker) to 5 (always or almost always identified as a non-native speaker. Participants' responses ranged from 2 to 5, for an average of 3.25 (Figure 19). In the case of participant Hanna, this high frequency of being identified by her accent may be why her self-rating for her accent decreased after study abroad.

Figure 19. Self-reported frequency of being identified as a non-native speaker



Conclusion of proficiency analyses

Participants improved in their French speaking and listening proficiency as measured by the EIT, for all six categories of evaluation. Overall, their accuracy in reading and writing did not improve tremendously as measured by the cloze test. On average, participants' self-assessments of their reading, writing, listening, and speaking improved from *Intermediate* to *Advanced*. They reported being identified as non-native speakers about half the time, and there was no identifiable trend in how nativelike they believed their own accents to be before and after study abroad.

Motivation and Identity

The theme of motivation and identity was meant to address research questions RQ1b and RQ2a (Table 4). It included the attitudinal and ideal selves questionnaires.

Table 4. Research questions and instruments for motivation and identity theme

Instruments addressing each research question		
Research Questions	**Instruments**	**Progress**
Social Factors		
RQ1a. Will study abroad students learning French accommodate to ambient speech patterns during their study abroad program and acquire the nasal vowel perception patterns of the dialect of their host community in Paris?	Nasal vowel perception experiment	√
RQ1b. What are students' beliefs about the local community and its language? How do these affect (if at all) their motivation to improve the proficiency and accuracy of their spoken French?	Attitude/Motivation Test Battery	←
	Ideal L2 Selves Questionnaire	←
	Interviews	
Learner Factors		
RQ2a. Will study abroad students with a strong *ideal self* motivation towards the local community acquire the dialect-specific nasal vowel perception patterns more accurately than students with lower integrative or ideal self-motivation studying in the same environment?	Attitude/Motivation Test Battery	←
	Ideal L2 Selves Questionnaire	←
	Nasal vowel perception experiment	√
RQ2b. What other factors (such as proficiency or contact with native speakers) affect the acquisition of nasal vowel perception?	Cloze Test	√
	Elicited Imitation Test	√
	Language Contact Profile	
	Observations	

Possible L2 Selves Questionnaire

The modified Possible L2 Selves Questionnaire (MacIntyre et al., 2009) served multiple purposes and was therefore analyzed in multiple ways. Aggregate scores were calculated to look for trends among the participants for the different items. Each column of

the questionnaire will be displayed using two separate measurements in the same table: first, column showing the difference between the response percentages to show which items changed in prominence, then a column showing the sum of response percentages before and after study abroad to rank the relative prominence of each item.

"**Describes me now."**

First, for the first two columns ("Describes me now" and "Describes possible future"), the percentage of *yes* answers was calculated for each prompt, and the prompts were ranked in two ways. First, the number of *yes* responses from before study abroad was subtracted from the average number of *yes* responses given after study abroad to find which items reflected the largest changes during the study abroad experience. Then, the before and after study abroad percentages were added to determine which items the participants identified with the most overall.

The top five attributes given a *yes* response before and after study abroad show that these participants enjoyed speaking French, considered themselves to be knowledgeable people, appreciated French art and literature, wanted to learn many languages, and considered themselves cultured people.

For the "Describes me now" column, eight attributes showed an increase at or above 50% in the number of *yes* responses, all of which were specific to Paris, France, and Europe. More participants reported after study abroad that they understood the views of Parisians, met and conversed with Parisians, thought like French people, understood French literature, felt at ease with Parisians, had friendships with Parisians, met and conversed with French people, and met and conversed with European people. Only participants Cady and Jaynie reported that they acted like Parisians after study abroad (Table 5).

In spite of the geographically-specific attributes that increased, unexpectedly, there was no increase in the percentage of participants who reported feeling at ease with people

who spoke French. Particularly when compared with the increased feeling of ease and friendship with Parisians, this shows a potential disconnect between participants' perceptions of French-speakers generally and of the inhabitants of Paris specifically.

Table 5. Percentage of *yes* answers to the prompt "Describes me now," with items ordered by difference between before and after study abroad percentage of *yes* responses

	"Describes me now" In order by before/after difference			
	Before (%yes)	After (%yes)	Difference	Sum of %
Prompt				
Increases over 50%				
Understand views of Parisian people	0.17	0.83	0.67	1.00
Meet and converse with Parisian people	0.17	0.75	0.58	0.92
Think like French people	0.00	0.50	0.50	0.50
Understand French literature	0.25	0.75	0.50	1.00
Feel at ease with Parisian people	0.17	0.67	0.50	0.83
Friendships with Parisian people	0.17	0.67	0.50	0.83
Meet and converse with French people	0.33	0.83	0.50	1.17
Meet and converse with European people	0.42	0.92	0.50	1.33
Increases below 50%				
Participate freely in activities of other cultural groups	0.42	0.83	0.42	1.25
Work at a job using French	0.00	0.42	0.42	0.42
Understand the views of French people	0.25	0.67	0.42	0.92
Think like European people	0.08	0.42	0.33	0.50
Think like Parisian people	0.00	0.33	0.33	0.33
Act like European people	0.00	0.33	0.33	0.33
Go to French films in the original language	0.42	0.75	0.33	1.17
Appreciate French art and literature	0.75	1.00	0.25	1.75
Feel at ease with European people	0.67	0.92	0.25	1.58
Feel at ease with French people	0.50	0.75	0.25	1.25
Friendships with French people	0.50	0.75	0.25	1.25
Act like French people	0.00	0.25	0.25	0.25
Read newspapers, magazines, and website in French	0.67	0.92	0.25	1.58
Feel respected because I speak French	0.67	0.83	0.17	1.50
Understand the views of European people	0.42	0.58	0.17	1.00
Act like Parisian people	0.00	0.17	0.17	0.17
Be a cultured person	0.75	0.92	0.17	1.67
Friendships with European people	0.75	0.83	0.08	1.58
Friendships with people who speak French	0.75	0.83	0.08	1.58
Travel to French speaking areas/countries	0.67	0.75	0.08	1.42
Want to learn many languages	0.83	0.92	0.08	1.75
No change				
Be a knowledgeable person	0.92	0.92	0.00	1.83
Feel at ease with people who speak French	0.75	0.75	0.00	1.50
Enjoy speaking French	1.00	1.00	0.00	2.00

“Describes possible future.”

For the column “Describes possible future,” there were four items with unanimous *yes* responses both before and after. There was a large ceiling effect for this column. Students responded that, in their futures, it would be possible for them to understand the views of Parisian people, be a knowledgeable person, be a cultured person, and understand the views of French people. The items with the lowest percentage of *yes* responses were those that said the students could foresee a possible future wherein they could think or act like Europeans, French, or Parisians. Acting like Parisians had the fewest number of *yes* responses. The dichotomy in these responses toward the social groups reveals that students could foresee themselves understanding these groups of native French speakers, but could not foresee themselves thinking or acting like them (Table 6).

On average, the percentage of *yes* responses decreased between before and after study abroad questionnaires for the column “Describes possible future”. Although more individual students answered *yes* for this column after study abroad than before, those items that did change from *yes* to *no* after study abroad were remarkably consistent. The participant with the most *yes* responses that were changed to *no* after study abroad was Jackie, who answered *yes* to 32 items in this column prior to study abroad but only 7 after study abroad. For many prompts, hers were the only *no* responses after study abroad.

Table 6. Percentage of *yes* answers to the prompt "Describes possible future," with items ordered by difference between before and after study abroad percentage of *yes* responses

	Describes possible future In order by before/after difference			
	Before (%yes)	After (%yes)	Difference	Sum of %
Prompt				
Increases				
Understand the views of European people	0.92	1.00	0.08	1.92
No change				
Understand the views of French people	1.00	1.00	0.00	2.00
Be a knowledgeable person	1.00	1.00	0.00	2.00
Be a cultured person	1.00	1.00	0.00	2.00
Understand views of Parisian people	1.00	1.00	0.00	2.00
Think like European people	0.75	0.75	0.00	1.50
Understand French literature	0.92	0.92	0.00	1.84
Feel respected because I speak French	0.83	0.83	0.00	1.67
Act like French people	0.58	0.58	0.00	1.17
Act like European people	0.58	0.58	0.00	1.17
Go to French films in the original language	0.92	0.92	0.00	1.84
Read newspapers, magazines, and website in French	0.92	0.92	0.00	1.84
Decreases				
Think like French people	0.83	0.75	-0.08	1.58
Think like Parisian people	0.75	0.67	-0.08	1.42
Appreciate French art and literature	1.00	0.92	-0.08	1.92
Feel at ease with European people	1.00	0.92	-0.08	1.92
Friendships with European people	1.00	0.92	-0.08	1.92
Feel at ease with French people	1.00	0.92	-0.08	1.92
Friendships with French people	1.00	0.92	-0.08	1.92
Friendships with Parisian people	1.00	0.92	-0.08	1.92
Enjoy speaking French	1.00	0.92	-0.08	1.92
Participate freely in activities of other cultural groups	1.00	0.92	-0.08	1.92
Meet and converse with French people	1.00	0.92	-0.08	1.92
Meet and converse with Parisian people	1.00	0.92	-0.08	1.92
Work at a job using French	1.00	0.92	-0.08	1.92
Travel to French speaking areas/countries	1.00	0.92	-0.08	1.92
Feel at ease with people who speak French	1.00	0.83	-0.17	1.83
Friendships with people who speak French	1.00	0.83	-0.17	1.83
Feel at ease with Parisian people	1.00	0.83	-0.17	1.83
Want to learn many languages	0.92	0.75	-0.17	1.67
Meet and converse with European people	1.00	0.83	-0.17	1.83
Act like Parisian people	0.58	0.25	-0.33	0.83

“Is this a desired or undesired future?”

For the other three columns of the questionnaire that elicited numerical responses, a similar analysis was conducted with each item’s average responses on the Likert scale. First, the average scores from before and after study abroad were added to show their relative overall importance to the participants. Then, the average scores before study abroad were subtracted from the average scores after study abroad to illuminate any changes between the two time points.

On average, Likert scale responses increased for the column “Is this a desired or undesired future?” between the before and after study abroad questionnaires. Most attributes were rated as more desired after study abroad, and the few that were rated less desirable after study abroad only had very slight differences. The notable exceptions to this were “Act like Parisian people” and “Meet and converse with French people,” which declined 0.24 and 0.1 points, respectively (Table 7).

Table 7. Average Likert responses to the prompt "Is this a desired or undesired future?" with items ordered by the difference between before and after study abroad responses

	"Desired or undesired future" In order by before/after difference			
	Before (avg.)	After (avg.)	Difference	Sum of ratings
Prompt				
Increases				
Understand French literature	4.25	4.91	0.66	9.16
Think like French people	3.58	4.18	0.60	7.77
Act like European people	3.25	3.82	0.57	7.07
Participate freely in activities of other cultural groups	4.50	4.91	0.41	9.41
Think like European people	3.67	4.00	0.33	7.67
Understand the views of European people	4.58	4.91	0.33	9.49
Think like Parisian people	3.67	3.91	0.24	7.58
Go to French films in the original language	4.67	4.91	0.24	9.58
Read newspapers, magazines, and website in French	4.67	4.91	0.24	9.58
Understand the views of French people	4.83	5.00	0.17	9.83
Appreciate French art and literature	4.75	4.91	0.16	9.66
Meet and converse with Parisian people	4.67	4.82	0.15	9.48
Want to learn many languages	4.50	4.64	0.14	9.14
Understand views of Parisian people	4.42	4.55	0.13	8.96
Act like French people	3.42	3.55	0.13	6.96
Friendships with French people	4.92	5.00	0.08	9.92
Enjoy speaking French	4.92	5.00	0.08	9.92
Travel to French speaking areas/countries	4.92	5.00	0.08	9.92
Feel at ease with European people	4.83	4.91	0.08	9.74
Feel at ease with French people	4.83	4.91	0.08	9.74
Work at a job using French	4.58	4.64	0.05	9.22
Feel respected because I speak French	4.50	4.55	0.05	9.05
No change				
Be a knowledgeable person	5.00	5.00	0.00	10.00
Be a cultured person	5.00	5.00	0.00	10.00
Friendships with European people	5.00	5.00	0.00	10.00
Feel at ease with people who speak French	5.00	5.00	0.00	10.00
Friendships with people who speak French	5.00	5.00	0.00	10.00
Decreases				
Meet and converse with European people	4.92	4.91	-0.01	9.83
Feel at ease with Parisian people	4.83	4.82	-0.02	9.65
Friendships with Parisian people	4.83	4.82	-0.02	9.65
Meet and converse with French people	4.92	4.82	-0.10	9.73
Act like Parisian people	3.33	3.09	-0.24	6.42

“How likely is this future?”

Based on the sum of average responses to the column “How likely is this future?” participants rated as most likely the attributes of “Travel to French speaking areas/countries,” “Be a cultured person,” “Appreciate French art and literature,” and “Be a knowledgeable person.” They rated as least likely the attributes, “Act like French people,” “Act like European people,” “Think like Parisian people,” with the lowest likelihood rating for “Act like Parisian people” (Table 8).

On average, there was an increase in reported likelihood of these future attributes. The items with an increase over 0.5 points were “Participate freely in activities of other cultural groups,” “Understand French literature,” “Feel at ease with Parisian people,” and “Think like French people.” Those with the largest decreases were “Meet and converse with French people” and “Act like Parisian people.” Participants believed themselves to be likely to be at ease around Parisians, but unlikely to act like them. This could be an indication that, at least for some participants, they had become comfortable as tourists or observers of Parisian life but did not view themselves as participants in it.

Table 8. Average Likert responses to the prompt "How likely is this future?" with items ordered by the difference between pre- and post-study abroad responses (a higher number means that the attribute was considered more likely)

	Likelihood of future In order by before/after difference			
	Before (avg.)	After (avg.)	Difference	Sum of ratings
Item				
Increases				
Participate freely in activities of other cultural groups	3.92	4.50	0.58	8.42
Understand French literature	3.83	4.42	0.58	8.25
Feel at ease with Parisian people	3.92	4.42	0.50	8.33
Think like French people	3.17	3.67	0.50	6.84
Feel at ease with French people	4.25	4.67	0.42	8.92
Feel respected because I speak French	3.75	4.17	0.42	7.92
Think like Parisian people	2.92	3.33	0.42	6.25
Think like European people	3.17	3.50	0.33	6.67
Friendships with Parisian people	4.00	4.33	0.33	8.33
Work at a job using French	3.92	4.17	0.25	8.08
Appreciate French art and literature	4.67	4.92	0.25	9.58
Friendships with French people	4.33	4.58	0.25	8.92
Act like French people	3.08	3.33	0.25	6.41
Enjoy speaking French	4.58	4.75	0.17	9.33
Understand the views of French people	4.25	4.42	0.17	8.67
Feel at ease with people who speak French	4.33	4.42	0.08	8.75
Understand views of Parisian people	3.92	4.00	0.08	7.92
Understand the views of European people	3.92	4.00	0.08	7.92
Act like European people	3.17	3.25	0.08	6.42
Be a knowledgeable person	4.67	4.75	0.08	9.42
Friendships with people who speak French	4.50	4.58	0.08	9.08
Feel at ease with European people	4.42	4.50	0.08	8.92
No change				
Be a cultured person	4.83	4.83	0.00	9.67
Friendships with European people	4.67	4.67	0.00	9.33
Go to French films in the original language	4.67	4.67	0.00	9.33
Meet and converse with Parisian people	4.50	4.50	0.00	9.00
Want to learn many languages	3.33	3.33	0.00	6.66
Decreases				
Travel to French speaking areas/countries	4.92	4.83	-0.08	9.75
Read newspapers, magazines, and website in French	4.58	4.42	-0.17	9.00
Meet and converse with European people	4.67	4.50	-0.17	9.17
Meet and converse with French people	4.75	4.50	-0.25	9.25
Act like Parisian people	3.00	2.50	-0.50	5.50

“How often do you think about this future?”

The average scores of each item before and after study abroad were first added to determine their overall prominence across participants. Those attributes that participants reported thinking about the most were: “Be a cultured person,” “Be a knowledgeable person,” “Travel to French-speaking areas/countries,” and “Friendships with people who speak French.” Those they report thinking about the least were: “Think like European people,” “Think like Parisian people,” and “Act like Parisian people” (Table 9).

On average, there was an increase in responses before and after study abroad for the column “How often do you think about this future?” Participants thought about these possibilities more often after study abroad than they had before. The attributes with the largest increases were: “Feel at ease with Parisian people,” “Enjoy speaking French,” and “Think like European people.” The attribute with the largest decrease in scores after study abroad, by far, was “Work at a job using French,” followed by “Go to French films in the original language,” “Friendships with people who speak French,” and “Feel at ease with people who speak French.” This indicates that the participants thought about some aspects of interaction with their host community more than others after study abroad, and in particular, career prospects and general interactions with French speakers were less prominent in their minds than interactions with people from their host community. The fact that participants reported thinking more about understanding French literature than attending films in French could be explained, at least in part, by the fact that all 12 participants took literature courses while in Paris.

Table 9. Average Likert responses to the prompt "How often do you think about this future?" with items ordered by the difference between before and after study abroad responses (a higher number means that the participant reported thinking about the attribute more often)

	How often you think about it In order by before/after difference			
	Before (avg.)	After (avg.)	Difference	Sum of ratings
Prompt				
Increases				
Feel at ease with Parisian people	3.75	4.25	0.50	8.00
Enjoy speaking French	4.00	4.50	0.50	8.50
Think like European people	2.75	3.17	0.42	5.92
Understand the views of European people	3.50	3.83	0.33	7.33
Feel respected because I speak French	3.67	4.00	0.33	7.67
Feel at ease with European people	3.58	3.92	0.33	7.50
Meet and converse with European people	3.92	4.17	0.25	8.08
Understand the views of French people	3.75	4.00	0.25	7.75
Understand views of Parisian people	3.50	3.75	0.25	7.25
Think like Parisian people	2.75	3.00	0.25	5.75
Appreciate French art and literature	4.08	4.33	0.25	8.42
Act like French people	3.00	3.25	0.25	6.25
Meet and converse with Parisian people	4.25	4.50	0.25	8.75
Participate freely in activities of other cultural groups	3.67	3.83	0.17	7.50
Be a knowledgeable person	4.83	4.92	0.08	9.75
Meet and converse with French people	4.33	4.42	0.08	8.75
Think like French people	3.00	3.08	0.08	6.08
Friendships with European people	4.17	4.25	0.08	8.42
Act like European people	3.08	3.17	0.08	6.25
Act like Parisian people	2.83	2.92	0.08	5.75
No change				
Be a cultured person	4.92	4.92	0.00	9.83
Understand French literature	3.42	3.42	0.00	6.83
Feel at ease with French people	4.25	4.25	0.00	8.50
Friendships with French people	4.25	4.25	0.00	8.50
Read newspapers, magazines, and website in French	4.17	4.17	0.00	8.33
Decreases				
Travel to French speaking areas/countries	4.83	4.75	-0.08	9.58
Friendships with Parisian people	4.17	4.08	-0.08	8.25
Want to learn many languages	4.17	4.08	-0.08	8.25
Friendships with people who speak French	4.58	4.42	-0.17	9.00
Feel at ease with people who speak French	4.50	4.33	-0.17	8.83
Go to French films in the original language	4.42	4.25	-0.17	8.67
Work at a job using French	4.58	4.25	-0.33	8.83

Categories of aspects of self

Following Macintyre et al. (2009), each participant's motivational pattern was labeled both before and after study abroad according to the pattern of his or her responses to the first two (yes/no) columns. These categories were as follows: *Developing* aspects of self, where the participant identified that most items described him or herself both now and in the future; and *expanding* aspects of self, where the participant identified most items as not describing him or herself now but describing a possible future. None of these participants fell into a third category of *extraneous* to self, where the participant responded that most attributes were not applicable now and that he or she did not envision them being true in the future (Table 10).

Table 10. Aspects of self before and after study abroad

Participant	Self Category-Before	Self Category-After
François	Developing	Developing
Zendo	Expanding	Developing
George	Expanding	Expanding
Cady	Developing	Developing
Gordon	Expanding	Developing
Blair	Expanding	Developing
Clare	Expanding	Developing
Jackie	Expanding	Developing
Hanna	Expanding	Developing
Gaston	Expanding	Developing
Jaynie	Developing	Developing
Amy	Developing	Developing

The Possible L2 Self for participant Jaynie was categorized as *Developing* both before and after study abroad in spite of the fact that she only provided an answer for seven of the 32 items in the "Possible future" column of the post-test. However, all of these responses were *Yes*.

Although eight participants were categorized as *Expanding* in their perceptions of their French L2-speaking selves prior to study abroad, all but George had moved to *Developing* at the end of the program. George was very humble in his interviews, saying during the program, "I was never much of a person with a good head on his shoulders… I'm not gonna do a complete about-face or anything, but it's been a real change. I've really had to think about things."

This movement from *expanding* to *developing* aspects of self indicates that, after study abroad, most participants could envision themselves becoming members of a community of French speakers. In MacIntyre, McKinnon, and Clément's (2009) study during the development of this instrument, those participants who were categorized as having *developing* aspects of self showed higher levels of motivation, integrativeness, and perceived competence than those categorized as having *expanding* aspects of self. If this pattern can be extended to the current participant group, it appears that participants became more positive in their motivation than they had been prior to the program.

Attitude/Motivation Test Battery

The Attitudes and Motivation Test Battery (Gardner, 1985) was analyzed by scoring each of the eleven categories separately depending on the maximum point values of the items in each category. Each item had a maximum Likert score of 6 (signifying a rating of "very much" or "strongly agree"), and categories were worth between 30 and 72 points. For statistical analysis, raw points were used. When comparing categories, scores were converted to percentages out of the maximum score.

Students reported the highest level of motivation, with an average score above 80% both before and after study abroad, for the categories of: "General Attitudes Toward the L2 Community," "Positive Attitudes Toward Learning French," "Cultural Interest," and "Ideal L2 Self." There was not a great difference between overall motivation scores on the AMTB

before and after study abroad, nor were there great differences between category scores before and after study abroad. This indicates that, as a group, these participants' motivations and attitudes were stable across their study abroad experience (Table 11).

Table 11. Average percentages per motivational category, before and after study abroad, and the difference in percentage, in order by highest combined motivation to lowest.

	AVERAGE BEFORE	AVERAGE AFTER	COMBINED AVERAGE	Difference
General Attitudes Toward Community	0.88	0.91	0.90	0.03
Positive Attitudes Toward Learning French	0.86	0.89	0.88	0.03
Cultural Interest	0.84	0.90	0.87	0.06
Ideal L2 Self	0.80	0.85	0.83	0.05
Attitudes Toward Europe Community	0.79	0.80	0.80	0.02
Attitudes Toward France Community	0.77	0.81	0.79	0.05
Attitudes Toward Paris Community	0.67	0.64	0.66	-0.03
Instrumentality (Promotion)	0.65	0.64	0.65	-0.01
Instrumentality (Prevention)	0.41	0.43	0.42	0.02
"Ought to" L2 Self	0.29	0.29	0.29	0.00
Negative Attitudes Toward Learning French	0.26	0.25	0.26	-0.02

Although the difference was not remarkable across the group in aggregate, there was considerable variation between the scores of individual participants. The range and standard deviation were larger for the AMTB scores after study abroad than before, which indicates a more complex reality than is apparent in the aggregated calculations (the range was 125 before and 178 after, with a standard deviation of 36.7 before and 55.9 after). The minimum score decreased from 356 to 342, while the maximum score increased from 481 to 520. Students could have more positive or more negative attitudes and motivation after studying abroad.

These variations in scores, both between participants and within participants at the two time points, point to a broad variety of students' experiences and their perceptions of

them. Most dramatically, participants Cady and Gordon increased in their motivational scores by 11%, while participant Amy decreased in her motivational score by 15% (Table 12).

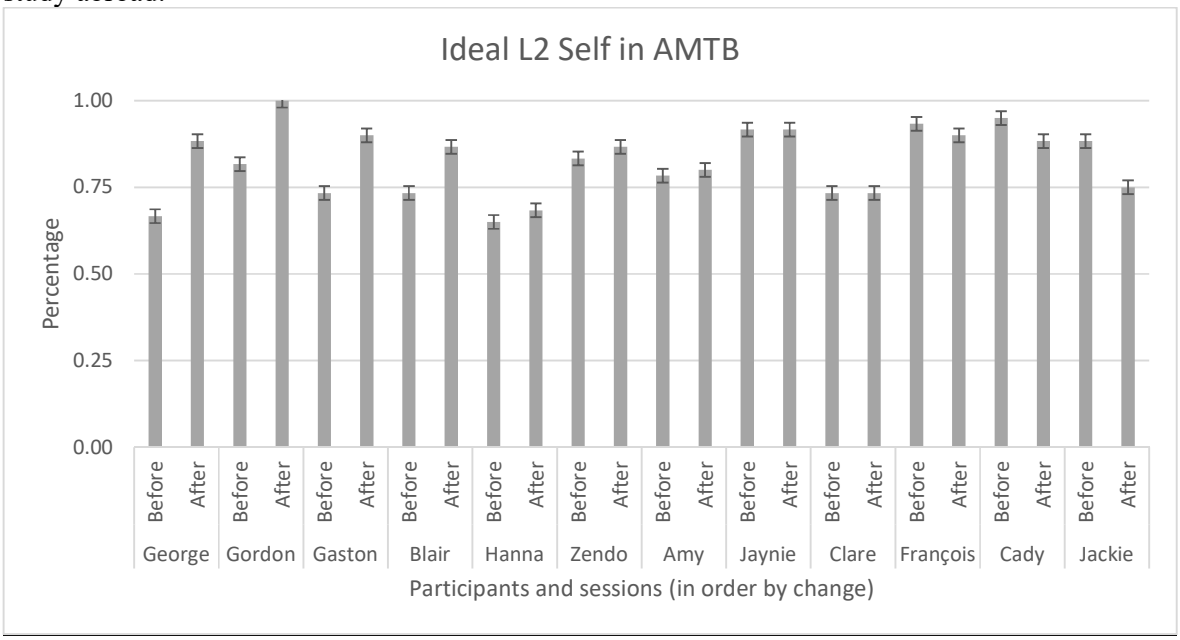
Table 12. Participant scores and percentages on AMTB before and after study abroad.

Subject	Total score before	Total score after	Difference in total score	Percentage before	Percentage after	Difference in total percentage
Maximum	*612.00*	*612.00*		*1.00*	*1.00*	
François	446.00	449.00	3.00	0.73	0.73	0.00
Zendo	394.00	387.00	-7.00	0.64	0.63	-0.01
George	356.00	387.00	31.00	0.58	0.63	0.05
Cady	451.00	518.00	67.00	0.74	0.85	0.11
Gordon	450.00	520.00	70.00	0.74	0.85	0.11
Blair	380.00	438.00	58.00	0.62	0.72	0.09
Clare	399.00	407.00	8.00	0.65	0.67	0.01
Jackie	383.00	377.00	-6.00	0.63	0.62	-0.01
Hanna	418.50	391.00	-27.50	0.68	0.64	-0.04
Gaston	405.00	457.00	52.00	0.66	0.75	0.08
Jaynie	481.00	463.00	-18.00	0.79	0.76	-0.03
Amy	436.00	342.00	-94.00	0.71	0.56	-0.15
Combined total	4999.50	5136.00	136.50	0.68	0.70	0.02
Maximum combined total	7344.00	7344.00		1.00	1.00	

To further explore these individual differences, those categories most relevant to the research questions were examined separately. As expected, most participants increased in their self-reported rate of motivation for the category of Ideal L2 Self. The prompts for this category formed the basis for the development of the Possible L2 Selves Questionnaire, so it is reasonable to expect that changes after study abroad that were manifested in the Ideal L2

Self category of the AMTB would be similar to those in the "Describes me now" category of the Possible L2 Selves Questionnaire. This is in fact the case, with small increases across most participants. In contrast to the "Describes me now" category of the Possible L2 Selves Questionnaire, increases in this category of the AMTB were unremarkable, but this may be explained in part by the fact that it had fewer items. Contrary to the overall trend, three participants (François, Cady, and Jackie) decreased in their motivation in this category after study abroad, while others either increased or remained unchanged (Figure 20). On the Possible L2 Selves Questionnaire, all three of these students were categorized as *Developing* in their senses of L2 self after study abroad, and Jackie even moved from *Expanding* to *Developing*.

Figure 20. Scores on the AMTB category of Ideal L2 Self by participant before and after study abroad.



Participants' attitudes toward Parisians, French people, and the Europeans in general were variable. Some participants' attitude and motivation scores toward these communities became more positive after study abroad, while others became more negative (Figures 21-

23). For example, Amy's attitudinal scores toward Parisians, the French, Europeans, and the French-speaking community all decreased, while Zendo and Jackie's attitudinal scores decreased toward Parisians while increasing toward the French and Europeans. Gaston's attitudinal scores toward Parisians decreased, but his score increases for other categories were among the highest in the group.

Figure 21. AMTB attitudes toward Paris community before and after study abroad by participant

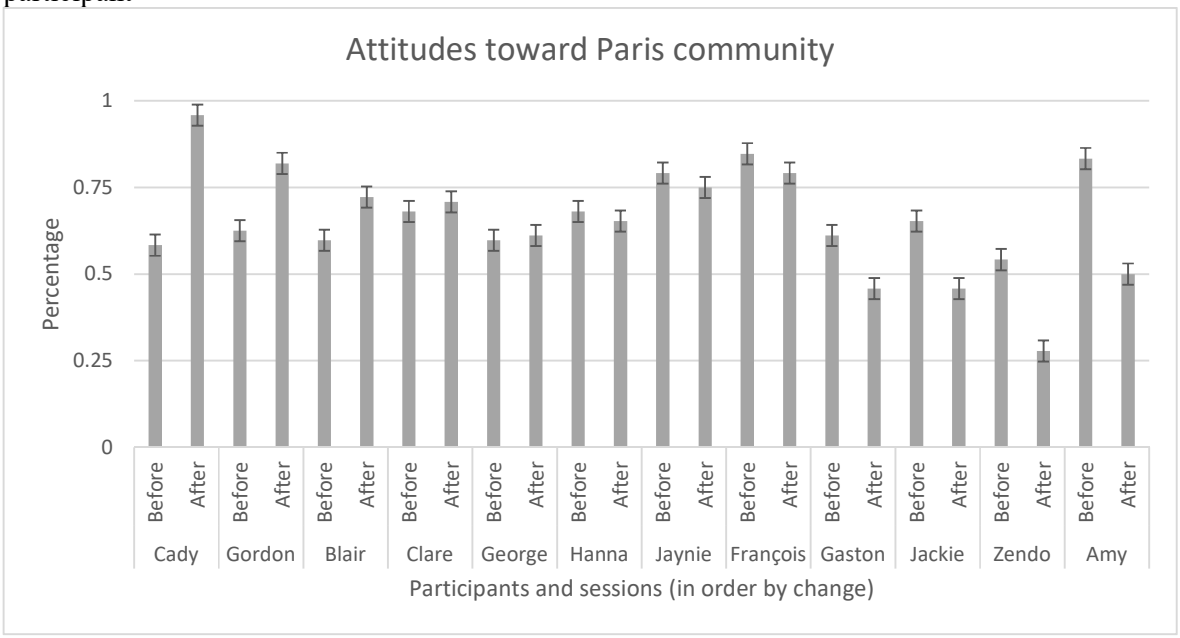


Figure 22. AMTB attitudes toward French community before and after study abroad by participant

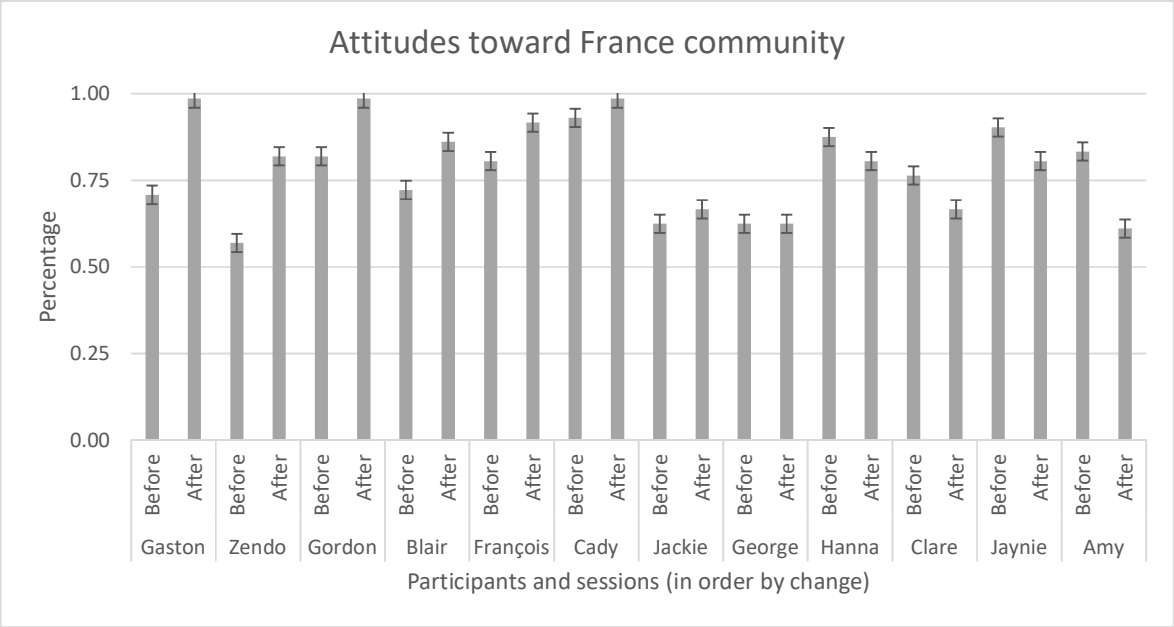
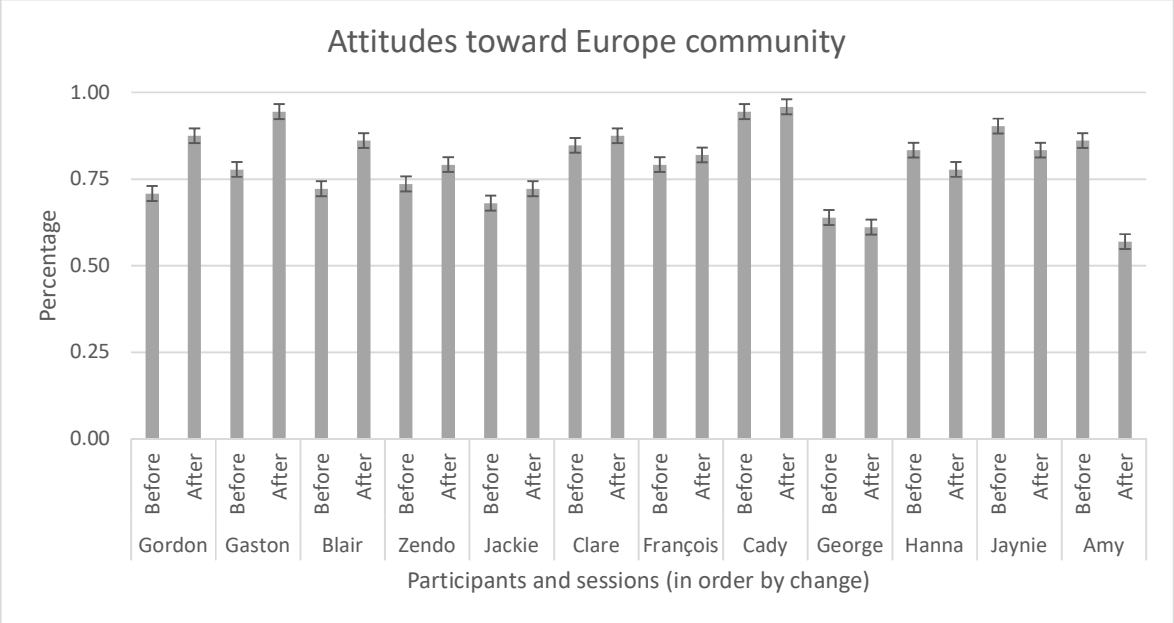


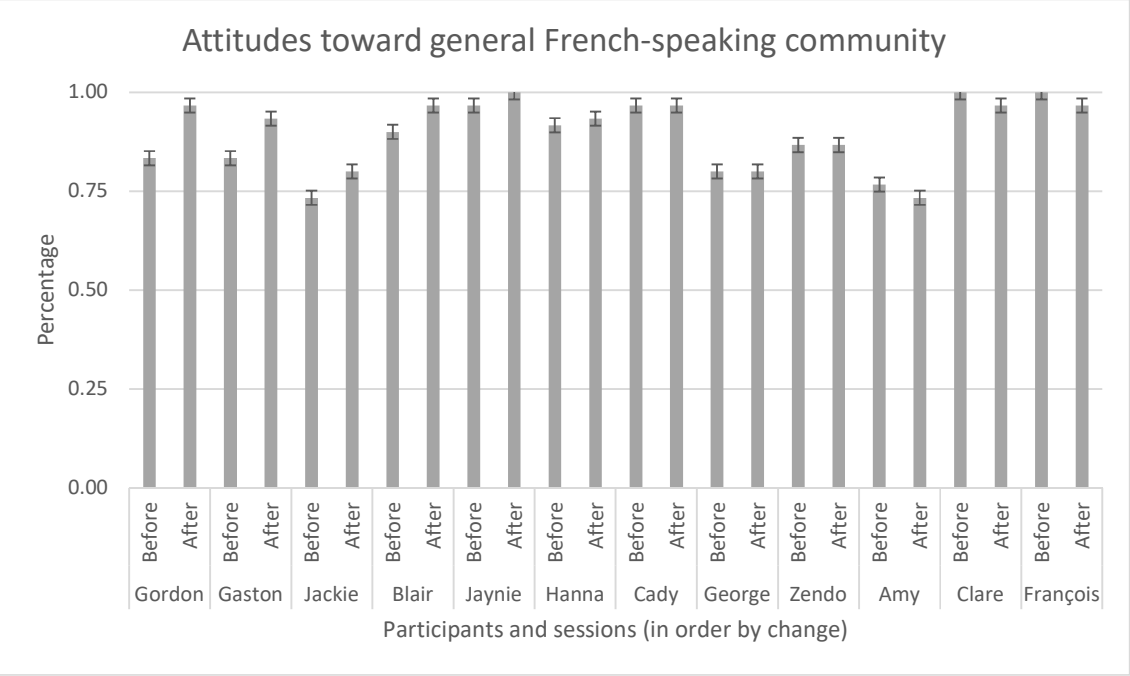
Figure 23. AMTB attitudes toward European community before and after study abroad by participant



However, in contrast to the reported attitudes toward people from Paris, France, and Europe, participants' attitudes either remained the same or increased for the category of attitudes toward the general French-speaking community. As a group, participants had more

positive attitudes toward the more abstract concept of French speakers in general than they did toward members of the specific, named communities (Figure 24).

Figure 24. AMTB attitudes toward general French-speaking community before and after study abroad by participant



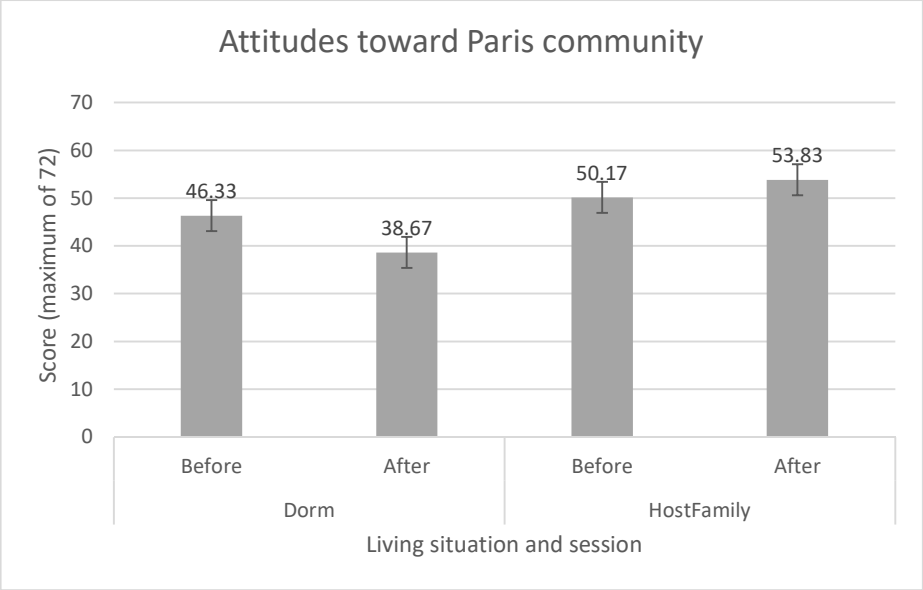
Merging L2 Identity and Motivation

All 12 participants reported in interviews that they benefited from and enjoyed their study abroad experience in Paris, mainly commenting on the abundance of activities and monuments in the city. However, as demonstrated by their responses both on the Ideal L2 Selves Questionnaire and the modified Attitude/Motivation Test Battery, several of them had a less favorable opinion of the inhabitants of Paris after spending a semester there. Participants even remarked on this in their interviews, with some noting explicitly that there was a difference between French people and Parisians. Regardless of their opinions of their host community, as a group, participants moved toward their desired French-speaking selves as people who were cultured, knowledgeable, and enjoyed speaking French. Since all participants increased in their oral proficiency scores except Gaston (who was excluded),

although their opinions of Parisians varied idiosyncratically, it was not possible to find a consistent mathematical correlation between motivational scores and proficiency scores.

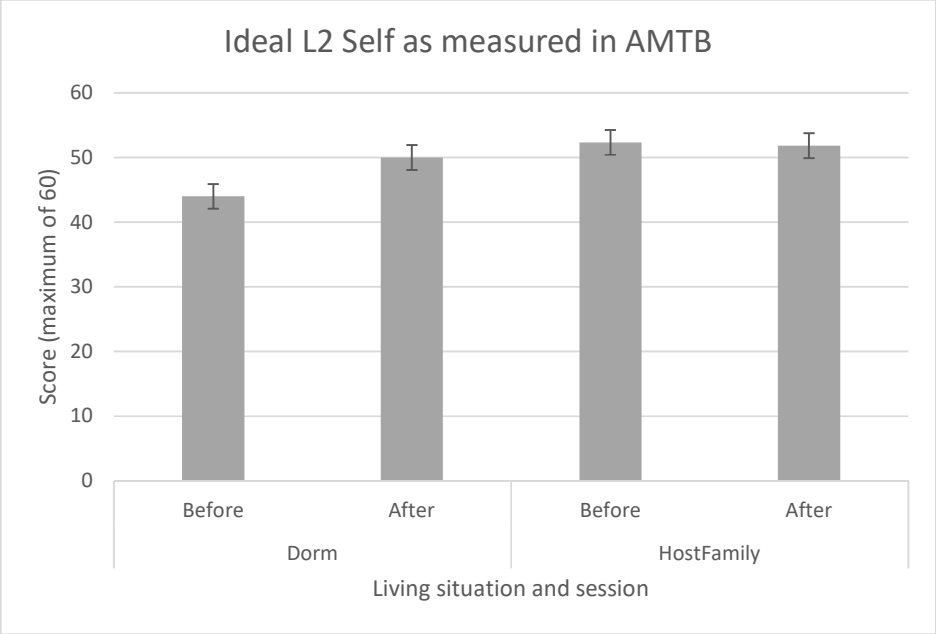
Students who lived in dormitories showed, on the whole, less positive opinions of Paris after a semester in Paris than did those students who stayed in host families. Students who stayed in host families tended to have slightly higher opinions of Parisians prior to the program, and their opinions tended to increase after the program (Figure 25).

Figure 25. AMTB scores for attitudes toward Parisians



In spite of their less positive attitudes toward the host community, students living in dormitories showed a larger increase in their Ideal L2 Self scores on the AMTB than did their classmates in host families, whose scores were higher prior to the program and remained close to the same. This could show that students are able to experience increased overall motivation as L2 learners after study abroad without forming an emotional connection to their immediate host community. It can also mean that those students who are more motivated to integrate into their host communities are more likely to choose a host family in the first place (Figure 26).

Figure 26. AMTB Ideal L2 Self score by living situation



Ideology about and Contact with the Host Community

The theme of ideology about and contact with the host community was meant to address research questions RQ1b and RQ2b (Table 13). It included the time students reportedly used French and English and the contexts of that language use. It also addressed other elements present in the attitudinal questionnaires that specifically elicited students' opinions about the host community. These findings were illustrated with information from the interviews.

Table 13. Research questions and instruments for ideology and contact theme

Instruments addressing each research question		
Research Questions	**Instruments**	**Progress**
Social Factors		
RQ1a. Will study abroad students learning French accommodate to ambient speech patterns during their study abroad program and acquire the nasal vowel perception patterns of the dialect of their host community in Paris?	Nasal vowel perception experiment	√
RQ1b. What are students' beliefs about the local community and its language? How do these affect (if at all) their motivation to improve the proficiency and accuracy of their spoken French?	Attitude/Motivation Test Battery	← √
	Ideal L2 Selves Questionnaire	← √
	Interviews	←
Learner Factors		
RQ2a. Will study abroad students with a strong *ideal self* motivation towards the local community acquire the dialect-specific nasal vowel perception patterns more accurately than students with lower integrative or ideal self-motivation studying in the same environment?	Attitude/Motivation Test Battery	√
	Ideal L2 Selves Questionnaire	√
	Nasal vowel perception experiment	√
RQ2b. What other factors (such as proficiency or contact with native speakers) affect the acquisition of nasal vowel perception?	Cloze Test	√
	Elicited Imitation Test	√
	Language Contact Profile	←
	Observations	

Language Contact Profile

The Language Contact Profile (LCP) (Freed et al., 2004) asked questions about the people and activities participants spent time with while on study abroad. One of the first questions was about their living arrangements during their semester in Paris. Six participants lived with host families, and six lived in *foyers*, which were dormitories for young people that were not limited to students. Only one of the host families was originally from Paris, while four others were from different parts of France, and one was originally from Russia but had

lived for many years in Paris. The dormitories housed residents in individual rooms. Residents in the dormitories came from all over the world. In the interviews, participants who lived in these *foyers* reported that there were few French residents and that most residents were American, British, Spanish, and North African. Participants reported that English was the lingua franca of the *foyers*. Amy even told the *foyer* staff that she only spoke English because she was tired when she moved in.

All students took at least five classes while in Paris, most of which were literature classes. Two students participated in an internship assisting with English teaching in a middle school. This provided additional contact with the host community, though not in the target language. Students complained during their interviews that they had too much reading and writing homework for their classes. George spoke about this at length and said that he felt the amount of reading in particular was making it impossible to spend as much time in the community as he would have preferred. He said during the program that the purpose of studying abroad was "more to… integrate. And that's impeded by the workload, I feel." One class involved required field trips to art museums, which students mentioned as being one of the most interesting. A graduate assistant for the program taught a one-credit course with the intention of forcing students to explore Paris because they had to give presentations about their experiences in the city. However, some students only presented about their frequent travels outside France.

The LCP also included a detailed questionnaire that asked participants how many days per week and hours per day they engaged in each activity, on average. Although there were more items that asked for details about the languages encountered in different activities, this analysis focused only on those items that were most relevant to the research questions:

2. On average, how much time did you spend speaking, in French, outside of class with native or fluent French speakers during this program?

4. How often did you use French outside the classroom for each of the following purposes?

4c. For superficial or brief exchanges e.g., greetings, "Please pass the salt," "I'm leaving," ordering in a restaurant, with my host family, French roommate, or acquaintances in a French speaking dormitory.

4d. Extended conversations with my host family, French roommate, friends, or acquaintances in a French-speaking dormitory, native speakers of English with whom I speak French

6. How much time did you spend doing the following each week?

6b. speaking French to native or fluent speakers of French

6c. speaking English to native or fluent speakers of French

6d. speaking French to nonnative speakers of French (i.e., classmates)

6e. speaking English to nonnative speakers of French (i.e., classmates)

7. How much time did you spend doing each of the following activities outside of class?

7a. overall, in reading in French outside of class

7g. overall, in listening to French outside of class

7l. overall, in writing in French outside of class

8. On average, how much time did you spend speaking in English outside of class during this program?

For this analysis, the estimated average time per week was calculated by multiplying the number of days by the number of hours. However, each hour count participants could choose was a range, rather than a specific number of hours: *0-1, 1-2, 2-3, 3-4, 4-5,* and *more than 5*. Therefore, it was necessary to differentiate between responses where participants reported zero days a week and 0-1 hours (which was the closest option to saying that they

never did the activity) and those where participants reported one day per week and 0-1 hours per day (meaning that they did the activity, but only rarely). To address this, responses of zero days per week and 0-1 hours per day were calculated as zero hours, and those of one day per week and 0-1 hours per day were calculated as one hour. For all other ranges that were selected, the upper number of the range was included for the calculation. For the response *more than 5 hours per week,* the number of days was multiplied by the number of hours, and then one was added to the total estimated hours to differentiate it from those responses of *4-5 hours per week*. Thus, the maximum listed for any activity was 36 hours, although the true number of hours may have been higher (Table 14).

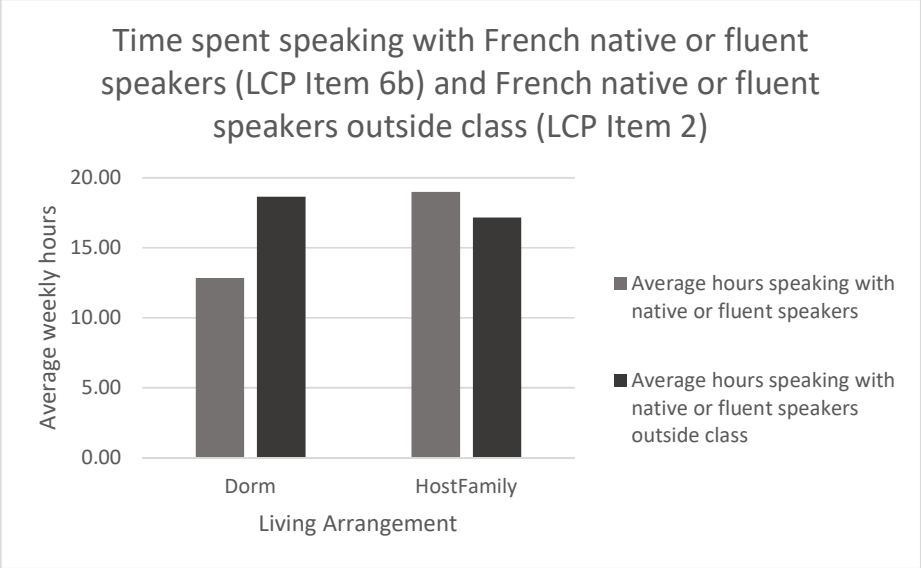
Table 14. Mean, minimum, maximum, and standard deviation of reported hours spent doing each activity per week, in order by average reported time spent on each activity

Item	Mean	Minimum	Maximum	Standard Deviation
8. On average, how much time did you spend speaking in English outside of class during this program?	27.08	14	36	8.44
6e. Time spent speaking English to nonnative speakers of French (i.e., classmates)	23.58	3	36	10.92
7g. Time spent overall, in listening to French outside of class	20.17	6	36	9.12
2. On average, how much time did you spend speaking, in French, outside of class with native or fluent French speakers during this program?	17.92	7	35	8.03
7a. Time spent, overall, in reading in French outside of class	17.75	4	36	10.48
6b. Time spent speaking French to native or fluent speakers of French	15.92	4	36	8.87
7l. Time spent, overall, in writing in French outside of class	13	0	36	9.65
4c. Time spent using French for superficial or brief exchanges e.g., greetings, "Please pass the salt," "I'm leaving," ordering in a restaurant, with my host family, French roommate, or acquaintances in a French speaking dormitory.	11.42	2	21	5.14
6d. Time spent speaking French to nonnative speakers of French (i.e., classmates)	11.08	0	21	7.04
4d. Time spent using French for extended conversations with host family, French roommate, friends, or acquaintances in a French-speaking dormitory, native speakers of English with whom I speak French	9.25	1	28	8
6c. Time spent speaking English to native or fluent speakers of French	6.92	0	35	9.7

Participants reported speaking English in general and to nonnative speakers of French more than any other activities. Surprisingly, responses were different for two similar items: "On average, how much time did you spend speaking, in French, outside of class with native or fluent French speakers during this program?" and "Time spent speaking French to native or fluent speakers of French." This difference might be explained by the fact that one specified that it was only asking about activities outside class, while the other did not. The largest discrepancy in the responses was between living situations for the question that said

"during this program" rather than "outside of class." Students who lived in the dormitories (*foyers*) reported that they spent an average of six fewer hours per week speaking French during the program than the students who lived with host families. For the question that specifically asked for hours spent speaking French outside class, dormitory and host family residents reported very similar estimates. Since the students mainly took the same classes with each other, it is likely that they had close to the same number of hours for activities outside class and may have estimated the time of exposure to French very broadly to fill their extracurricular time (Figure 27).

Figure 27. Comparison of *foyer* (dorm) residents' and host family residents' self-reported average hours per week speaking French with native or fluent speakers of French



Comparing living arrangements.

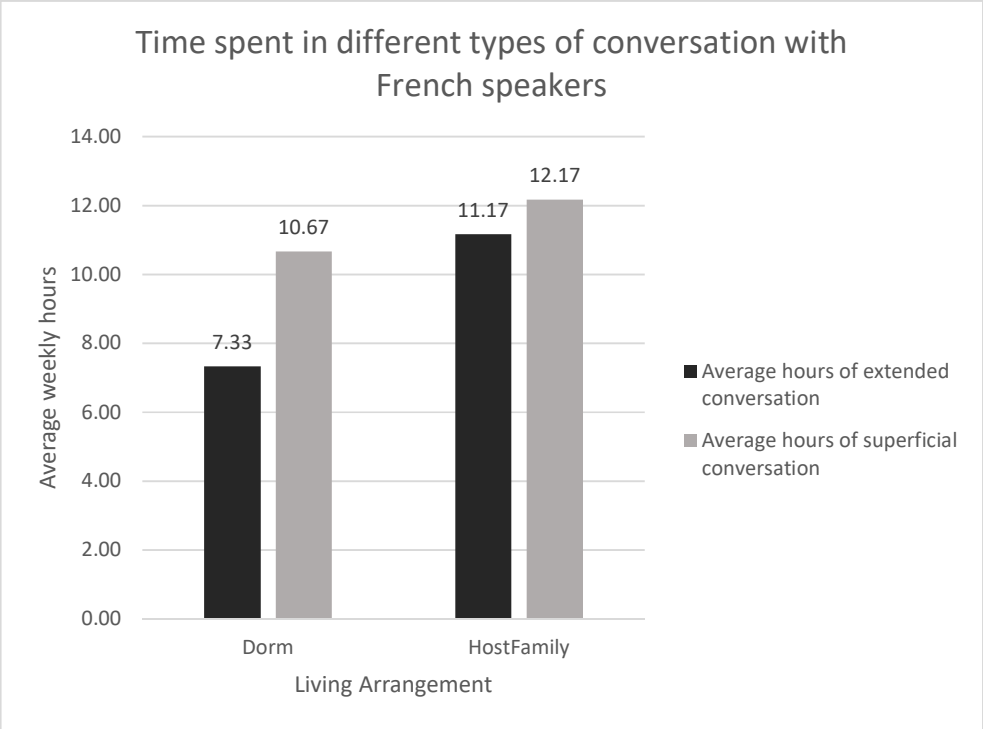
Students living in *foyers* reported spending 3.84 fewer hours having extended conversations with native speakers of French than did students living in host families, and 1.5 fewer hours having superficial conversations. This indicates that students living with host families not only spent more time speaking French with native speakers, but also that some of those interactions had more depth, requiring more flexibility than brief, repetitive service interactions (Table 15).

To estimate the overall time participants spent on each of the four modalities (speaking, reading, writing, and listening), the average times reported for the items in involving each type of activity were added for dormitory and host family residents. These estimates are necessarily somewhat abstract and must not be interpreted as a representation of participants' weekly schedules. In addition to differences in interpretation of the items, some of the LCP items overlapped: for example, a participant might speak French with a native speaker and with a non-native speaking friend in the same conversation (Figure 28).

Table 15. Sum of average hours reported in each modality

Type of activity	**Dormitory**	**Host Family**
Speaking French	61.67	69.5
Speaking English	58.67	56.5
Reading in French	21.5	14
Writing in French	11.5	14.5
Listening in French	17.17	23.17

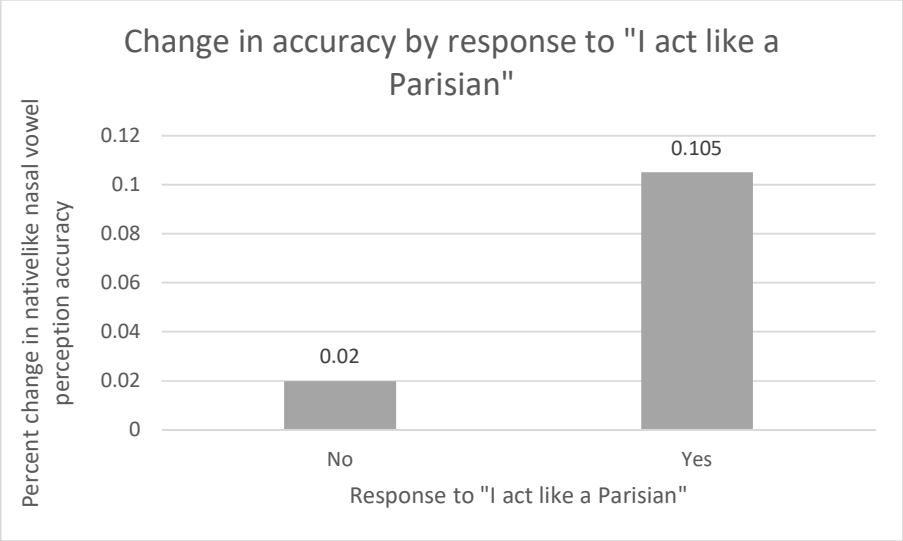
Figure 28. Comparison of time spent having extended versus superficial conversations, by living arrangement



Ideology about the Host Community

Only two participants (Cady and Jaynie) responded that they acted like a Parisian on their Ideal L2 Self questionnaires after the study abroad program. Participants Cady and Jaynie also had larger increases in near-native nasal vowel perception accuracy than the other students who had answered *no* to this question. These two participants lived with host families and talked about how wonderful their host families had been (Figure 29).

Figure 29. Changes in nativelike nasal vowel perception accuracy



Results of interviews and observations

It emerged in the interviews during the study abroad program that the students were frustrated that they did not have as much interaction with native speakers as they had hoped. This became a major theme of one of the focus group interviews. They took most classes with each other, taught by program faculty. Those students who tested into higher levels of French were able to take courses in a French institution, but these courses were tailored for international students and did not include native French speakers. During a focus group interview, Amy recounted an exchange during the orientation with the program director where all the participants realized for the first time that they would not have French students in their classes. “I was like, what about the French people? and he looks at me like ‘You're kidding right?’”

Participants also expressed disappointment about the large amount of reading and writing that was required by their courses, complaining that it prevented them from partaking in other, more immersive activities. George even said of his experience in the program, “This is more about study and less about being abroad.”

Although classes were taught in French, students reported that most of their interactions outside class were conducted in English. On weekends and during vacations, they normally traveled together in groups to locations outside Paris, speaking English amongst themselves. They had begun to spend time together prior to leaving the US, with the initial event having been organized by Gaston. Members of the group shared information with each other via private Facebook page. Those living in host families reported in interviews that they spoke to native speakers more than those who lived in the *foyers*, which corroborates the results of the Language Contact Profile. Participants were creative in finding situations to practice their French, however. For example, two participants joined sports teams and another attempted to join a community choir. One participant who lived in a *foyer* frequently ate dinner at the same restaurant and struck up a friendship with the wait staff. Another participant met native French speakers using the mobile dating app, Tinder. Several of the participants, but particularly Gordon, talked about meeting people in bars.

Although it was not discussed explicitly at any length, social media appeared to play a prominent role in students' social lives while on study abroad. Prior to one interview during the program, the interviewer arrived at the meeting place to see a participant with a laptop open and a smartphone on each side of it, a French one and an American one, while the participant seamlessly interacted with people using all three devices simultaneously. During class observations, the researcher sat at the back of the class and was able to see students browsing Facebook during lectures. Depending on who was on the other end of those conversations, social media and the omnipresence of technology had the potential to be either a tool or a liability for contact with the target language.

The Ideal L2 Self Scores were lower before study abroad for those students who stayed in the *foyers* (dormitories) than for the students who stayed with host families. This

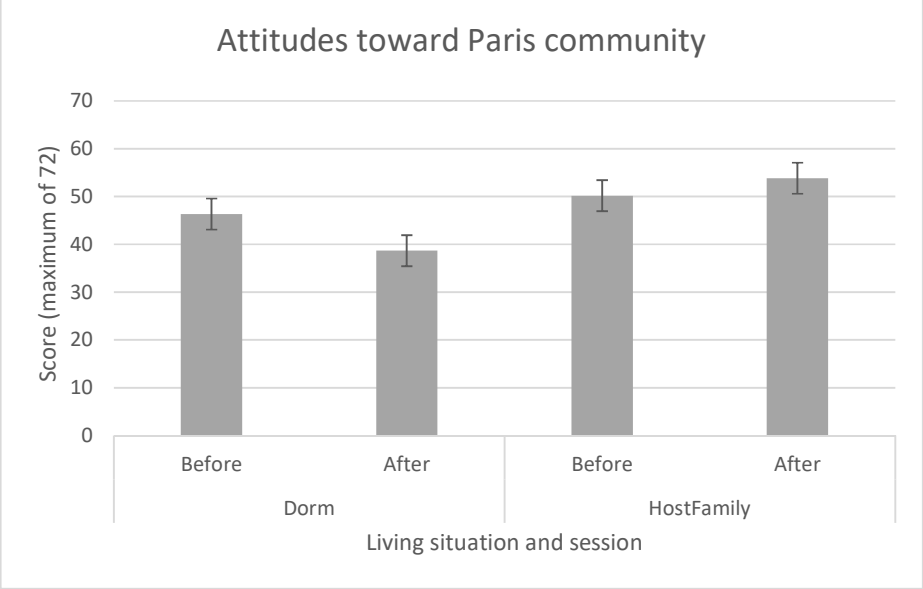
may have influenced their choice of living arrangement. By the end of the program, the Ideal L2 Self scores were similar regardless of living arrangement.

As with the Possible L2 Selves Questionnaire, those categories of the modified AMTB that were specific to the geographical areas revealed enlightening differences in students' opinions of Paris, France, Europe, and the general French-speaking community. There was considerable individual variation in whether participants had more positive or negative attitudes toward Parisians, French, and Europeans.

Participant attitudes toward host community by living situation

Those students who stayed in *foyers* (dormitories) had less favorable attitudes toward Parisians after study abroad than before study abroad. Students who stayed with host families had a more favorable attitude toward Parisians. This could indicate that the type and intensity of contact with members of the host community have an effect on attitudes toward the community (Figure 30).

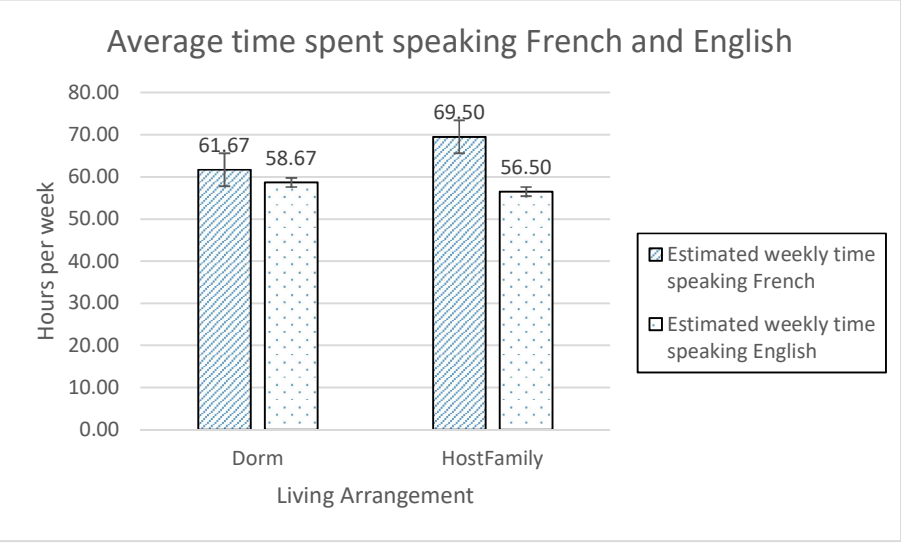
Figure 30. Attitudes toward Parisians before and after study abroad, by living situation



Theme of Language Contact

In their interviews, students complained that they did not have enough of a chance to get to know Parisians since their classes were with other international students. Here, there was a difference in reported contact between those who lived in the dormitories and those who lived in host families. One participant, Amy, who lived in a dormitory, described Parisians as "not very friendly." She said that there were always people around but that it was difficult to make friends with them on a deeper level than service interactions. On the contrary, Gordon said that he met locals through his host family, since he had host brothers close to his own age. Gordon also reported that most of his socializing in French was centered around going to bars and playing soccer. This was consistent with the general trend in the reported number of hours participants reported spending per week speaking French and English, with those participants living with host families reportedly speaking more French and less English than those living in the dorms, where English was a *lingua franca* (Figure 31).

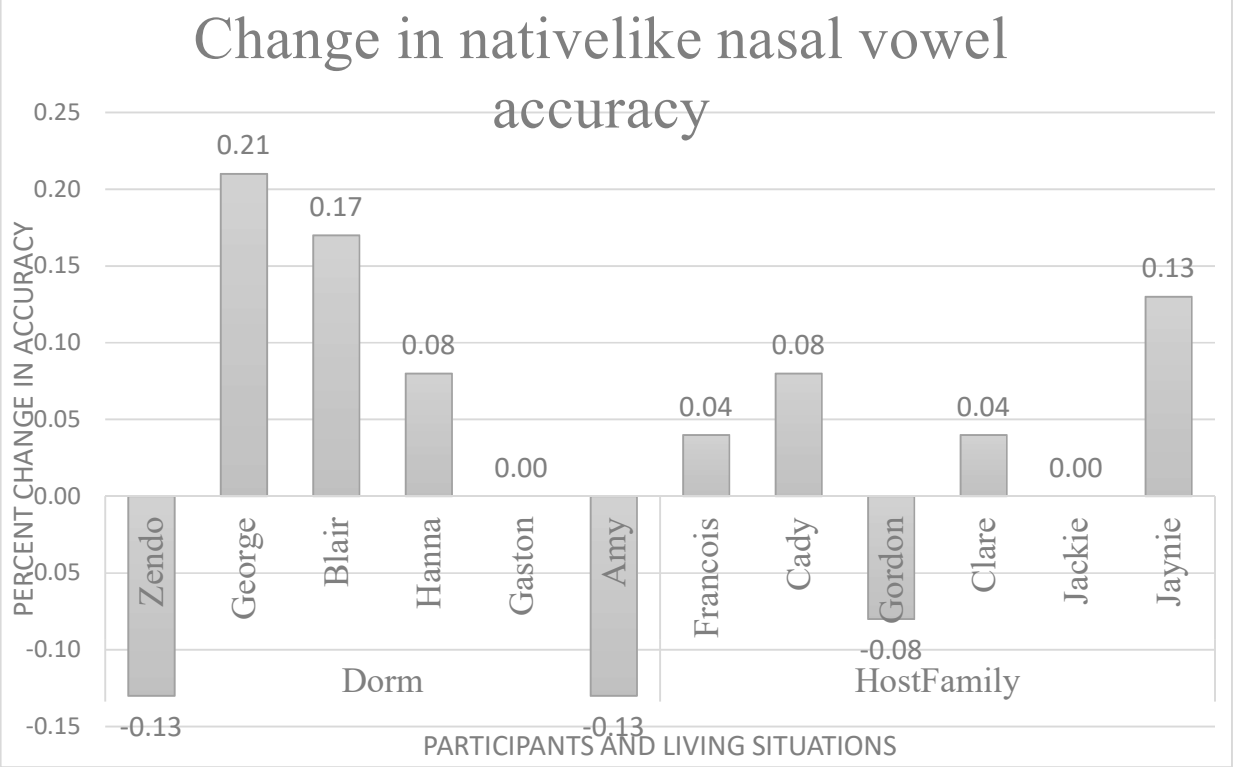
Figure 31. Average reported hours per week speaking French and English



Mixing with nasal vowel perception

Jaynie and George had the largest increase in nativelike accuracy in nasal vowel perception. However, George lived in a dormitory, and Jaynie lived with a host family. The average increase in nativelike accuracy was 3% for those in the dormitories and 4% for those living in host families, which somewhat obscures the fact that there were substantial individual differences between participants (Figure 32).

Figure 32. Change in nativelike vowel accuracy by participant and living situation



Merging of All Quantitative Measurements

The final step for the mixing process was to construct a spreadsheet containing the results of the vowel perception experiment and the categories of the proficiency tests and questionnaires that were relevant to the research questions. Since there were only twelve participants, inferential statistical analyses were not possible. Rather, SPSS was used to run

inter-item Pearson correlations between each of the categories. The correlations between each category and changes in nativelike accuracy nasal vowel perception were ranked in order. It will require more participants to determine whether any of these correlations are statistically significant. It is important to keep in mind that the fact that these elements correlate with each other does not necessarily mean that one caused the other (Table 16).

A few of the items most pertinent to the research question will be discussed here. The item with the highest correlation with changes in nativelike accuracy in nasal vowel perception was how similar the participant's accuracy was to native speakers before study abroad, with those who began the semester with the least nativelike perception making the greatest overall gains. The next highest correlation was with those participants who had the largest increase in their opinions of Paris after study abroad than before it (as shown in the AMTB section about opinions of Paris), with the raw score on the ATMB section about Paris after study abroad being the next most highly correlated. These were followed by how much reading participants reported doing in French each week during the program, which may not be an accurate accounting. Those who increased in their reading and writing proficiency (as shown on the cloze test) also increased their nativelike nasal vowel perception. Those who increased in their desire to act like Parisians after study abroad also experienced gains in nativelike nasal vowel perception.

Several items had negative correlations with increases in nativelike nasal vowel perception. Crucially for the research questions, the raw score on the AMTB category asking about the ideal L2 self after study abroad had zero correlation with increases in nativelike accuracy. The item with the greatest negative correlation with increased nativelike perceptual accuracy was the amount of reported time participants spent speaking English. This was followed by the scores on the speaking and oral proficiency test (EIT) both before and after study abroad (though a change in EIT score did positively correlate with nativelike

perception). More reported time spent listening and writing in French had a negative correlation with nativelike perception. Those participants with higher attitude and motivation scores and ideal L2 self scores on the AMTB prior to study abroad had lower increases in nativelike vowel perception accuracy. Those who began the program with higher proficiency scores had lower gains in nativelike perception accuracy. Importantly for the research questions, more positive attitudes about Paris prior to study abroad (as measured by the AMTB) were negatively correlated with nativelike vowel perception.

Table 16. Inter-item correlation (continued on next page). Difference between nasal vowel perception between native speakers and study abroad participants before and after study abroad, as correlated with other items in the mixed methods study

Correlation with increased approximation of nativelike nasal vowel perception					
Positive correlation		No correlation		Negative correlation	
Difference between nasal vowel perception accuracy and that of native speakers before study abroad	0.645	Score on AMTB items about Ideal L2 Self after study abroad	0.000	Score on AMTB items about France after study abroad	-0.006
Difference in scores of AMTB items about Paris before and after study abroad	0.488			Scores on the Ideal L2 Self questionnaire item about whether it is desired to act like a Parisian before study abroad	-0.103
Scores of AMTB items about Paris after study abroad	0.459			Score on the AMTB items about Paris before study abroad	-0.107
Reported time spent reading in French each week	0.453			Difference between scores on the AMTB items about France before and after study abroad	-0.110
Change in cloze test score before and after study abroad	0.427			Difference between nasal vowel perception accuracy and that of native speakers after study abroad	-0.174
Difference between scores on the Ideal L2 Self questionnaire item about whether it is desired to act like a Parisian before and after study abroad	0.239			Score on cloze test before study abroad	-0.205

Table 16 (continued). Difference between nasal vowel perception between native speakers and study abroad participants before and after study abroad, as correlated with other items in the mixed methods study

Correlation with increased approximation of nativelike nasal vowel perception					
Positive correlation		No correlation	Negative correlation		
Total AMTB score after study abroad	0.183			Reported time spent writing in French each week	-0.216
Cloze test score after study abroad	0.154			Total score on AMTB before study abroad	-0.226
Scores on the Ideal L2 Self questionnaire item about whether it is desired to act like a Parisian after study abroad	0.150			Score on AMTB items about Ideal L2 Self before study abroad	-0.239
Change in EIT scores before and after study abroad	0.147			Reported time spent listening in French each week	-0.309
Score on AMTB items about France before study abroad	0.114			EIT score before study abroad	-0.380
Combined sum of reported time spent speaking French each week	0.103			EIT score after study abroad	-0.399
				Combined sum of reported time spent speaking English each week	-0.587

However, after excluding the three exceptional students whose nasal vowel accuracy decreased (Amy, Zendo, and Gordon), the correlations were different (Table 17).

Table 17. Inter-item correlation excluding participants with decreased nasal vowel accuracy. Difference between nasal vowel perception between native speakers and study abroad participants before and after study abroad, as correlated with other items in the mixed methods study

Correlation with increased approximation of nativelike nasal vowel perception- excluding participants with decreased accuracy			
Positive correlation		Negative correlation	
Reported time spent reading in French each week	0.720	Reported time spent writing in French each week	-0.059
Score on cloze test before study abroad	0.647	Score on AMTB items about France after study abroad	-0.075
Cloze test score after study abroad	0.541	Score on AMTB items about France before study abroad	-0.129
Score on AMTB items about Ideal L2 Self after study abroad	0.498	Difference between nasal vowel perception accuracy and that of native speakers after study abroad	-0.226
Scores on the Ideal L2 Self questionnaire item about whether it is desired to act like a Parisian after study abroad	0.396	Total score on AMTB before study abroad	-0.259
Difference between nasal vowel perception accuracy and that of native speakers before study abroad	0.316	Score on the AMTB items about Paris before study abroad	-0.341
Difference between scores on the Ideal L2 Self questionnaire item about whether it is desired to act like a Parisian before and after study abroad	0.295	Score on AMTB items about Ideal L2 Self before study abroad	-0.445
Difference in scores of AMTB items about Paris before and after study abroad	0.289	Change in cloze test score before and after study abroad	-0.522
Combined sum of reported time spent speaking French each week	0.151	Combined sum of reported time spent speaking English each week	-0.523
Scores on the Ideal L2 Self questionnaire item about whether it is desired to act like a Parisian before study abroad	0.121	Reported time spent listening in French each week	-0.616
EIT score after study abroad	0.119		
Change in EIT scores before and after study abroad	0.100		
Scores of AMTB items about Paris after study abroad	0.098		
EIT score before study abroad	0.078		
Difference between scores on the AMTB items about France before and after study abroad	0.062		
Total AMTB score after study abroad	0.055		

Most notably, it emerged from these correlations that it was possible for study abroad participants to acquire higher levels of general proficiency without having also acquired more

nativelike nasal vowel perception. These students may have had particular aptitudes for language, or they may have had adequate passive exposure to the French language through simply being in Paris, even though they did not enjoy the company of Parisians. They might have been able to use a combination of cues to understand conversations without necessarily understanding every word or phoneme. Higher levels of Ideal L2 Self motivation prior to study abroad were also negatively correlated with increased nativelike nasal vowel perception, though higher motivation after study abroad was positively correlated. This could be interpreted as some students having inflated or inaccurate expectations about the host community prior to going abroad.

In spite of their insistence that the coursework required excessive reading, those participants who reported spending more time reading in French also had greater gains in their nativelike nasal vowel perception. On the surface, it is unclear how a typically silent activity could possibly assist with a gain in an auditory modality, such as accuracy in perceiving certain types of vowels. However, since participants took most of their courses together, this could extend to mean that those who were more dedicated in their coursework put forth more effort for their language development overall. More importantly, perhaps, regular reading in French could help strengthen their intuition for spelling and sound correspondences and ultimately help participants better identify phonemes, including nasal vowels. Speaking English (and by extension, spending most of their time with other program participants) was negatively correlated with nativelike nasal vowel perception. The social cohesiveness of the program group, while emotionally valuable for the participants, may have impeded some aspects of their language development.

Ethnography

The final piece of study was the ethnographic element, which addressed primarily RQ1b and RQ2b but informed the interpretation of other findings (Table 18). This included

observations of the program as well as excerpts from participant interviews that displayed how they viewed and interacted with their host community.

Table 18. Research questions and instruments for ethnography

Instruments addressing each research question		
Research Questions	**Instruments**	**Progress**
Social Factors		
RQ1a. Will study abroad students learning French accommodate to ambient speech patterns during their study abroad program and acquire the nasal vowel perception patterns of the dialect of their host community in Paris?	Nasal vowel perception experiment	√
RQ1b. What are students' beliefs about the local community and its language? How do these affect (if at all) their motivation to improve the proficiency and accuracy of their spoken French?	Attitude/Motivation Test Battery	√
	Ideal L2 Selves Questionnaire	√
	Interviews	←
Learner Factors		
RQ2a. Will study abroad students with a strong *ideal self* motivation towards the local community acquire the dialect-specific nasal vowel perception patterns more accurately than students with lower integrative or ideal self-motivation studying in the same environment?	Attitude/Motivation Test Battery	√
	Ideal L2 Selves Questionnaire	√
	Nasal vowel perception experiment	√
RQ2b. What other factors (such as proficiency or contact with native speakers) affect the acquisition of nasal vowel perception?	Cloze Test	√
	Elicited Imitation Test	√
	Language Contact Profile	√
	Observations	←

Observations

Courses in the program were mainly held in a building in the 6th arrondissement of Paris. Literature courses- the majority of the course offerings- were taught by faculty associated with the program or with the students' home university. Students with high enough

placement scores were also able to take courses at a nearby Parisian institution, primarily courses in business French or in pronunciation[4]. Much to the students' disappointment, as discussed in one of the focus groups, there were no French students in their classes. The courses run by the program were composed of other students from the same program, and those at the Parisian institution were exclusively for international students for whom French was not a native language. With the exception of students in host families that had young adult children around their own age, program participants had to make an effort outside of program offerings to meet native speaker peers.

During the on-site visit, the researcher observed several literature classes. For the most part, they were given in a traditional lecture and discussion format. One of the courses had student presentations during the time of the visit, so the researcher was able to observe several students' use of French. There was little correction of French observed in the classroom, and the corrections the researcher observed were lexical, as when a student hesitated while searching for the correct word. It was noted that participants were inconsistent in knowing when to pronounce nasal vowels. It appeared to the researcher that not all the students had done their reading for class, since the same handful of students were raising their hands to answer questions while their classmates remained silent. Most students had laptops open during class, most of which were being used for social media or for preparing presentations. When the researcher observed interactions between the students in class, these interactions were almost exclusively in English, though they addressed the instructors in French.

[4] One student expressed regret at having taken the pronunciation class in Paris rather than at the home university, since the course in Paris involved mainly parroting and dictation without explanation of how or why the sounds were articulated.

However, it would be unfair to generalize the observations during those two weeks or to assume these behaviors to represent a general pattern. This visit took place during the midterm exam period and just prior to spring break. The students were preparing for trips (most were planning to travel to other countries together) while also writing papers and preparing presentations, and some participants reported feeling very overwhelmed. A major complaint in individual and focus group interviews during this visit was that the work load of literary reading was excessive. One participant was seen weeping in the hallway and said that it was due to stress. However, participants also spoke of the positive, transformative experiences they were having abroad.

Views of Parisians

Prior to the study abroad program, most participants had similar narratives about Paris and Parisians. Most had never been to Paris before and did not report that they knew any Parisians beforehand. When asked why they wanted to study abroad in Paris specifically, students tended to talk about it as though it were an inevitable next step for somebody who studied French. As was typical of this group, prior leaving for Paris, Gordon, said: "I chose Paris specifically, because I've been taking, uh, French for about, ten years? I started in fifth grade and I've had it, every year since. Umm, I'm now a junior in college." Participants spoke about stereotypes of the city's material culture: art, history, and food. A handful mentioned its draw as a large, centrally-located city.

François, for instance, described this sentiment succinctly: "It's very, pretty, historical city. I like, you know, the *idea* of Paris. Like, the *romantic* city. It's a really cool place to be, um, like sitting in cafés… I may become, become a minor food snob and a wine snob." Clare predicted that she would like Paris because she called herself a "girly girl." When pressed about what she meant by this, she said, "I think, just because the stereotypical view is just, 'Oh, it's a *romantic* city! And the *shopping*!' And, you know, all of that kind of stuff, so,

which, I guess is an *American* view of it, I'm sure." Cady, during the program, described its allure as a big city: "Obviously this is a big cultural center, like London or even New York at this point." Students frequently mentioned that Paris had a lot of "culture." When pushed to explain this concept in more detail, students generally mentioned the prevalence of the fine arts, which could be interpreted as a nod to their perception of Parisian identity as urban and upper-class. This interpretation of culture in primarily superficial, material terms could also be indicative of participants' initial roles as tourists and consumers. Applying the ACTFL construct of culture, participants mentioned tangible products, but not the practices or perspectives that would indicate a deeper connection to the structure of the target language community (American Council on the Teaching of Foreign Languages, 2012).

However, during and after the program, these narratives began to diverge. Although the students had very similar experiences in the classroom, their experiences outside the classroom led to very different opinions about Parisians. Some of these differences emerged during the focus group interviews, as when Amy said that she felt unsafe walking in the city at night and Cady and George did not (but still recommended against doing so in certain neighborhoods). Mirroring their results on the attitudinal measurements, some participants talked about Parisians as stereotypical snobs, while others described them as friendly. Amy, for example, was aware that her experience of Parisians may not have been universal. In her interview after the program, she said, "I didn't exactly live with Parisians, um, so, they always looked a little unfriendly. But I, I gather they're more friendly once, once you get to know them. So they take their time to get to know people. I'd often grab dinner alone." Zendo, in her interview during the program, said of Parisians: "In general, or, the ones I've interacted with over here, they aren't very, um, welcoming of, like, other people." Zendo also mentioned in a focus group interview that Parisians would "get mad" at people who didn't understand how to use the métro.

However, Jaynie contradicted this view of Parisians in her interview after the program:

> "The people were surprisingly nice. I kind of had a, not a negative image, but kind of, an image in my head that Parisians were a little snooty, but they weren't. Everybody was very nice and open. And even when tourists, when people came and visited me, and I could show them around, and people wanted to be there. It's a great place."

While Jaynie lived in a host family, students living in dormitories could also have positive experiences with Parisians. For example, George spent a lot of time exploring the area around his dormitory. After his semester in Paris, he reported:

> "Uh, the living, breathing Paris, uh, the Paris where people are trying to find their way, um, is the Paris that I saw. And the, the Paris that sort of made all the difference for me. Um because it's, it's a real community. It's a real, uh, it's not just, it's not sort of like a set piece like, uh, we tend to boil Paris down to here."

George directly addressed the stereotype of the unfriendly Parisian during a focus group interview as being just a different cultural norm for approaching strangers, saying, "The thing that Parisians despise the most is disingenuousness."

Emotional and social barriers were as impactful as housing arrangements in preventing some students from venturing out of the dormitories. For example, Zendo said after the program: "I mean, that's fine, that's French culture, but if you're not a smoker, like, I don't smoke, it's very difficult to go engage in a social activity like that and make friends. That's why I didn't make very many friends in my dorm." Similarly, Amy reported, "I would sometimes feel a little holed-up in my room. And I'd just be online, talking to my friends

back here because I didn't have anyone else to interact with as much. And that was the main downer of the trip."

Students like Amy and Zendo might have benefited from more program-initiated activities in the surrounding community to help them overcome this feeling of isolation from their host community. At the same time, not all students with what might be presumed to be built-in connections through host family placements ended up bonding as closely with their host families as others. Jackie, for instance, could not answer follow-up questions about her host parents and lost touch with them immediately upon returning to the US.

There were hints that a few of the students had noticed some of the complexity of the identity of French people and Parisians, though some of their generalizations appeared to be based mainly on their own interpersonal interactions rather than on consuming local media or discussing questions of identity with members of their host community. With few exceptions, the question of immigration as a controversial element of French identity was not mentioned in the interviews. Those students who stayed in dormitories said that the majority of the other residents were from other countries, but did not elaborate on what that might mean for Parisian identity, beyond the fact that they did not consider these residents to be Parisians. George enthused about the varieties of cuisine available in his neighborhood as a result of the mix of ethnicities. The only student who specifically spoke about the big question of national identity and immigration was Cady. When asked what it was like to live among Parisians, Cady reported that her host mother would complain about how her taxes were paying for low-income Muslim immigrants, alluding to a contrast between wealthy, secular, White Parisians and "others" who happened to also live in Paris. Some students mentioned that they had perceived a difference between cold, hurried Parisians and warm, friendly French people from other parts of the country during their travels, specifically noting the warm welcome they had received while traveling as a group in Normandy. This could be interpreted in part

as a distinction between urban and rural communities. While filling out his questionnaire after study abroad, François began to laugh and said to the researcher, “It’s good that you listed Parisians and the French separately!”

CHAPTER 5: CONCLUSION AND DISCUSSION

The results of the present study suggest that study abroad students can in fact better acquire nativelike perception of local dialectal features when they interactively align with (learn to emulate typical speech patterns of) their host communities through long-term repeated interactions with multiple native speakers during their stay in the host country. Increased target language proficiency alone does not guarantee this type of dialectal acquisition, nor does placement in a host family, unless homestay placement is also accompanied by positive, in-depth engagement with the host community. These results have implications for second language acquisition and sociolinguistics. For second language acquisition, these results point to the importance of long-term, guided exposure to rich contextual input in the acquisition of nativelike pronunciation for second language learners, as well as the necessity to create such learning environments while developing study abroad programs. For sociolinguistics, these results underscore the likely association – and the need to further investigate – the attitudinal and ideological aspects of learning during inter-personal contact with another culture.

In this study, several interacting factors correlated with the acquisition of authentic local nasal vowel perception. Those participants who had more positive attitudes toward Parisians after the study abroad program tended to develop more nativelike accuracy, suggesting a confirmation of the theory of interactive alignment. However, having a positive attitude toward Parisians prior to the study abroad program did not necessarily lead to nativelike accuracy, and in some cases was actually negatively correlated. This could demonstrate that subscribing to an overly idealistic figure of personhood prior to arriving in Paris could set students up for disappointment.

As expected, those students who reportedly spent more time speaking and reading French while in Paris were more likely to acquire more nativelike nasal vowel perception, as these students must have received more French language input. Those who reported speaking more English, on the contrary, were less likely to improve in their nasal vowel perception. This is unlikely to be due to any deleterious effect from the English language itself, but rather it serves as a proxy for frequency of exclusive interactions with other native English-speakers, for the most part isolated from Parisians.

In this study, the effects of proficiency on nasal vowel perception were rather complex. Those participants with higher cloze test scores for reading and writing were more likely than their peers to develop more nativelike nasal vowel perception. Since this test required complete accuracy in spelling, it could reveal an attention to detail that might extend into the oral/aural modalities. However, high scores on the Elicited Imitation Test for listening and speaking did not necessarily correlate with increased accuracy in nativelike nasal vowel perception. All participants (except Gaston, who was excluded) improved their scores on this proficiency measurement after study abroad, but those students who did not *also* spend time pursuing in-depth interactions with Parisians did not improve in their nasal vowel perception. For this group, the study abroad experience led to gains in French proficiency, but it did not guarantee the set of practices that could lead to more nativelike nasal vowel perception. In other words, proficiency in grammar does not necessarily transfer to comparable proficiency in pronunciation.

A common concern among study abroad professionals is whether to place students with host families or in dormitories. In the present study, it emerged that students in host families had slightly larger increases in proficiency and reported more overall time speaking French. However, placement in a host family did not necessarily lead to better accuracy in nasal vowel proficiency as compared to dormitory placement. More frequent exposure to

French did not automatically increase participants' greater ability to perceive fine phonetic detail.

Participant Summaries

As in the methodology chapter, the following are brief summaries of some of the results from each individual participant. Commonalities in their nasal vowel perception results will be discussed in the following section. Of those participants who remained in contact with the researcher after their study abroad experience, most of them pursued careers that either directly employed their French abilities or considered their language and cultural experiences to be assets. These included fields such as environmental advocacy, marketing, and law enforcement. At least one participant was a recipient of a departmental award for outstanding academic achievement in French. At the time of this writing, the researcher is only aware of one participant who chose to pursue postgraduate education, studying medicine.

Amy's EIT score increased after study abroad, but her cloze test score decreased. As with others, this could indicate that she had become less attentive to written accuracy during her semester in Paris, but more attentive to oral communication. However, her nasal vowel perception accuracy became less nativelike after a semester in Paris, decreasing 13%. Amy lived in a *foyer*. She reported going to fewer movies in French after study abroad than before, which is consistent with a common complaint among participants that their high workload decreased their opportunities to participate in cultural activities in Paris. After study abroad, Amy reported that she did not understand the views of, think like, or act like members of her host community, but that she had begun to understand French literature and appreciate French art and literature after study abroad. Amy also said that she felt at ease with and had friendships with members of her host community after study abroad, while prior to study abroad she reported feeling at ease with and having friendships with French people and

Europeans but not with Parisians. Although she lived in a *foyer*, Amy evidently had enough exposure to Parisians to develop ease and friendships that she didn't have before going abroad.

Blair's EIT and cloze test scores both increased, with only a one point increase on the cloze test. She lived in a *foyer*. Of the group, Blair had the second greatest improvement in nativelike nasal vowel perception, with a 17% increase in accuracy after study abroad. In the "Describes me now" column of the Possible Selves Questionnaire, prior to study abroad, she answered *no* more often than *yes*, then answered *yes* more often than *no* after a semester in Paris. After study abroad, she reported that she understood the views of Parisian, French, and European people, and that she felt at ease with French and Parisian people, while prior to going abroad she only felt at ease with Europeans in general. Blair also reported growth in some general affective and cultural domains after study abroad, such as becoming able to participate freely in activities of other cultural groups and feeling respected for speaking French. After study abroad, she reported that she still did not think like Parisians or Europeans, but did think like French people. She also reported both before and after study abroad that she did not act like any members of her host community, and that she had friendships with French people and Europeans, but not with Parisians. It is somewhat unsurprising that she made friends with every group but Parisians, since Parisians were not typically residents of the *foyers,* which were mainly inhabited by people from other parts of France and other countries around Europe.

Cady's score on the EIT increased, and her cloze test score also increased, but only by one point. She reported becoming close to her Parisian host family. Her nativelike nasal vowel perception accuracy increased by 8% after her semester in Paris. In the "Describes me now" column of the Possible Selves Questionnaire, Cady changed all 19 of her *no* responses from before study abroad to *yes* responses after study abroad. On this instrument, she was

highly confident in her abilities and in the personally and socially transformative nature of her study abroad experience. Further information emerges by also examining Cady's responses for which possible selves were considered desirable. Prior to study abroad, she found it less desirable to consume media (literature, films, newspapers) in French, but said they were more desirable after study abroad. After her semester in Paris, Cady found it more desirable to think and act like Parisians than to think and act like French people or Europeans in general. Cady evidently had developed a particular affinity for thinking and acting like Parisians after study abroad that she did not develop for French people at large.

Clare's EIT and cloze test scores both increased after her semester in Paris. She reported becoming close to her host family. Her nativelike nasal vowel perception accuracy increased by 4% after study abroad. Although she reported growth as a speaker of French after studying abroad, she reported feeling less respected for speaking French than she had prior to her semester in Paris. This change could represent a lowering of her confidence in speaking French, or it could mean that the level of respect she perceived before study abroad was related to being one of the only French speakers in a primarily English-speaking environment. After study abroad, she reported that she thought and acted like Europeans, but did not think or act like Parisians or French people. It is possible that this reflects a belief that her thinking and behavior had changed in some way after her semester abroad, but not in a way specific enough to be identifiable as French or Parisian.

François improved in his scores on both the EIT and the cloze test after study abroad, pointing to increased proficiency in oral and written domains. He reported growing close to his host family. His nativelike nasal vowel perception accuracy increased by 4% after study abroad. After his semester in Paris, he reported that he had begun to think like Parisian people and understand the views of Parisian people, but that he no longer felt at ease with Parisian people or with people who spoke French. He said that he did not act like either French people

or Parisians either before or after study abroad. For François, as his French proficiency improved and he understood Parisians better, he evidently felt less at ease with them. For him, thinking like somebody from another culture may be a prerequisite to behaving like them.

Gaston's proficiency test scores had to be excluded from the analyses. Prior to the study abroad program, he forgot to turn in his cloze test. When the EIT was being administered to him the first time, there was a technical glitch. His proficiency scores after study abroad, however, were close to the group average. His nativelike nasal vowel perception accuracy did not change after a semester in Paris. He reported growth as a speaker of French, but that he neither thought nor acted like Parisians. As with other participants who lived in a *foyer,* Gaston's living situation more readily facilitated opportunities to socialize with people from other parts of France and Europe than with people from Paris. He also traveled outside the city frequently.

George's scores increased for both the EIT and the cloze test. Although he lived in a *foyer*, he reported making an effort to explore the surrounding neighborhood. George had the greatest increase in nativelike nasal vowel perception of the group, with a 21% increase in accuracy. His responses in regard to his growth as a French speaker were quite different from those of other participants, in that his responses did not change after his semester in Paris. Both before and after his semester in Paris, George said that he appreciated French art and literature, felt at ease with European people, enjoyed speaking French, wanted to learn many languages, and consumed media in French. In his interviews, George placed an emphasis on his own personal responsibility and was critical of his own academic progress. For this reason, it is possible that he felt unqualified to make claims that presupposed knowledge of other people's inner states (such as thinking, acting, or understanding others), rather than actively choosing to respond negatively to these statements because he knew them to be false.

Gordon's score on the EIT increased, and like Cady, his cloze test score also increased by only one point. He commented on his host mother's "really interesting accent," as she was raised in a rural area of Normandy. His written accuracy may not have improved dramatically, but his listening abilities were advanced enough to give him the sociolinguistic insight to recognize a regional accent. However, his nasal vowel perception accuracy became less nativelike after the semester in Paris, decreasing 8%. Gordon reported after study abroad that he did not understand or think like European people, nor did he act like any members of his host community. He reported after his semester in Paris that he understood and thought like Parisians and French people, but not like Europeans. For Gordon, it would appear that thinking like a group of people was a prerequisite to acting like them. He also reported after study abroad that he did not work in a job using French but considered it a possibility for his future.

Hanna's EIT score increased after study abroad, and her cloze test score only increased by one point. She stayed in a *foyer*. Her nativelike nasal vowel perception accuracy increased by 8% after a semester in Paris. Hanna reported growth as a French speaker after study abroad. She reported that she thought like French people, but not like Parisians or Europeans. She reported feeling at ease with members of her host community, but not forming friendships with or acting like any of them. She also responded that she did not feel at ease with people who spoke French in general. Hanna said that she met and conversed with French people and European people, but not with Parisian people. As with other residents of the *foyers*, she lived in close proximity to people from other parts of France and Europe, but did not live with Parisians, which might explain these differences.

Jackie's scores improved for both the EIT and the cloze test. Her nativelike nasal vowel perception accuracy did not change after her semester in Paris. She reported feeling uncomfortable and distant with her host family because of the language barrier, although her

proficiency test scores showed a level of accuracy comparable to that of her classmates. Of the group, Jackie had taken the fewest number of French classes prior to study abroad, which could explain some of her discomfort. She reported making growth as a French speaker after her semester in Paris. After study abroad, Jackie reported that she did not understand the views of or think like French people, that she understood the views of Parisian people but did not think like them, but that she understood the views of and thought like European people. She reported that she did not feel at ease with French or Parisian people, but did feel at ease with European people. As in the case of Clare, the willingness to identify with Europeans in general could possibly indicate that she recognized a difference in her thinking after study abroad but that this change was not specifically identifiable as French or Parisian. She reported that she did not act like any members of her host community, like other participants, possibly indicating a belief that thinking like somebody does not necessarily lead to behaving like them. Jackie said that she still did not understand French literature after a semester of taking classes mainly in French literature, which could be a result of her relative lack of previous French classes prior to going to Paris.

Jaynie's EIT score increased after her semester in Paris, but her cloze test score decreased. She reported becoming close to her host family. Her nativelike nasal vowel perception accuracy increased by 13% after study abroad. Similarly to Cady, Jaynie reported dramatic growth as a French speaker after her semester in Paris. Of the items presented on the Possible Selves Questionnaire, she found it more desirable to think like Parisians specifically or like Europeans in general than to think like French people, though she found it highly desirable to act like members of all three groups. This apparent preference for Parisians could be related to the connections she made with her Parisian host family.

Zendo increased her EIT scores for all six categories after her semester in Paris, but her cloze test score decreased. This could indicate that her focus in French had deemphasized

written accuracy while giving more energy to oral communication. Zendo reported that her negative experience in the *foyer* had colored the whole study abroad semester. Her nasal vowel perception accuracy became less nativelike after her semester in Paris, decreasing 13%. After her semester in Paris, she said that she understood the views of Parisians and Europeans and that she met and conversed with them. She reported making friends with French people, traveling to French-speaking places, and going to films in French. She indicated that she neither thought nor acted like French or Parisian people. For Zendo, understanding the target communities' views could occur without thinking or acting like them.

Participant Clusters

As in studies by Csízer and Dörnyei (2005) and MacIntye et al. (2009), in this study participants were divided into clusters for further interpretation of their behavior. However, rather than basing the clusters on motivational categories, participants in this study were categorized based on their levels of improvement (or lack thereof) in nativelike nasal vowel perception. Then the participants in each cluster were examined or commonalities in motivation and other learning behaviors. All participants reported travelling throughout Europe. Although many traveled together frequently, there was noticeable variation in how participants interacted with Parisians which may have led to differences in linguistic development. Moreover, there were similarities between the students whose nativelike nasal vowel perception improved and those whose nativelike nasal vowel perception did not change or became less accurate.

Increased accuracy after study abroad

George, Blair, and Jaynie showed improvements of over 10%. Contrary to expectations, George and Blair developed more nativelike nasal vowel perception after study abroad than their peers even though George and Blair were in *foyers.* Jaynie stayed with a host family. She said, "I love my host family. They were probably my favorite part." She was also one of the two participants who reported behaving like a Parisian after the program. Blair said of the program, "You need a foundation when you go, obviously, but I think I learned more there than anywhere else, um in terms of being comfortable with the language." George and Jaynie were two of the three French majors in the group, and Blair was the only participant with a declared French minor prior to the program. This could speak to George and Jaynie's motivation to improve their French as well as a possible aptitude for it.

François, Cady, Hanna and Clare showed improvements under 10%. François and Cady lived with host families, and Clare and Hanna lived in *foyers*. Cady was one of the three French majors in the group, and one of two students who reported that she behaved like a Parisian after the program. She reported that she always had "really good, in-depth conversations" with her host mother, giving the example that she and her host mother had talked at length about Muslim immigrants living in France. Hanna reported that "it was not a lot of adjustment" for her to get used to living in Paris and that she wished she could live there. François reiterated this, saying, "If I if I could integrate into the community, if I can meet people, I wouldn't have a problem living here." Although these students acknowledged that Parisians had a reputation of being unfriendly, they remarked that it was not really the case in their experience. The researcher also noticed during her visit to the program during the semester that these young women appeared to have altered their clothing choices, wearing more black in general and more classic cuts.

It is illuminating to note that Cady, Jaynie, and Clare all explicitly mentioned in their initial interviews that they wanted to become members of the host community. Cady said, "You have to be French now," while Jaynie and Clare both expressed a desire to be treated as members of a family. The overt integrative motivation evident in their comments was corroborated by their success in their nativelike local dialectal acquisition. George, who did not believe himself to have attained as much success in his integration as he apparently did- as shown in the contrast between his lower score *yes* responses on the "describes me now" column of the Possible L2 Selves questionnaire and his high attainment of local dialectal vowels- emphasized personal responsibility for his own language development. Recall that he said before the program: "That's on *me*."

No improvement or decreased accuracy after study abroad

Gaston and Jackie showed no change in nativelike nasal vowel perception after study abroad. Both these students reported spending most weekends traveling, beginning their interviews with a list of places they had traveled. Jackie had spent less time learning French prior to the study abroad program than any of her classmates, which may have contributed to her lack of confidence in her French abilities. In her interviews during and after the program, Jackie reported feeling uncomfortable and exhausted in Paris and in her host family because she couldn't understand the language as well as she would have liked. Jackie described her host family experience as "nerve-wracking" because of the language barrier. She spoke openly about feeling homesick, and fell out of touch with her host family after the program.

Gaston, on the other hand, had a very active social life. He chose to live in a *foyer* because he wanted to be able to stay out late and go to the bars. In his interview during the program, he listed the varied nationalities of his new friends, and described himself as having become more "cultured." When pushed to define this, he said, "Worldly experience. They say that travel is the only thing you spend money on that makes you richer, and that that was

exactly what I'm going for here." When observed giving a class presentation in the middle of the program, Gaston made many basic errors in grammar and pronunciation. To him, Paris appeared to be more of a launching pad for travel and international experience than a place to immerse oneself locally.

Amy, Zendo, and Gordon all showed decreased accuracy in nativelike nasal vowel perception after study abroad. Amy and Zendo both lived in *foyers*, and Gordon lived with a host family. Both young women reported feeling isolated due to their living situations, complaining about how they did not manage to make friends in the *foyers* and not extending their attempts to interact with the host community outside the dormitories. Zendo reported having a terrible experience in her *foyer* because people kept stealing her food and most of them smoked. In her interview after the program, Amy said that she had actively refused to learn local slang because "it sounds like it doesn't belong." With this mindset, she was able to safeguard her identity as a speaker of a prestigious language variety while justifying her lack of contact with its speakers. She also gave an example of correcting another student's French grammar, but her correction contained a different grammatical error. Gordon was active in his local peer group, many of whom he met through his host family, but he reported spending most of this social time either playing soccer or spending time in bars. In spite of his connections in the host community, the restricted semantic field of these activities may have provided him with less varied linguistic input than other activities.

Commonalities

Those students who spent more time with Parisians and reported a deeper connection with individual Parisians were, as a whole, more successful in acquiring the perception of their local nasal vowels. These students also spoke of Parisians as being welcoming and friendly. Although all the students in this program traveled outside Paris, some of them also

made an effort to develop relationships with individual locals. Those who reported partying in large groups or isolating themselves in their rooms were similar in their lack of improvement in nasal vowel perception accuracy. Importantly, the student with the least previous experience with the French language reported significant discomfort and culture shock, despite living with a host family. Her nasal vowel perception did not become more nativelike, while that of all the French majors improved.

If nativelike nasal vowel perception can be taken as a test for accommodation to local speech patterns, then one can probably state that in-depth contact with local native speakers– guaranteeing the greatest chance for interactive alignment – is a reliable way to develop greater accuracy in perceiving pronunciation in a foreign language. Such success, however, seems to require a minimum previous background in the target language so as to more easily meet communicative needs. Participants had to envision themselves as members of the host community to some extent in order to be able to benefit from the effects of greater exposure to the language.

Answering the Research Questions

The following section will review each of the four research questions in light of the results obtained in this study. This review starts with the important caveat that there were only twelve participants in this study, which means that these conclusions can only be tentative and will require further research for confirmation. The correlation results also pose an important chicken-and-egg conundrum: are those participants who are better at approximating nativelike vowel perception more likely to be highly motivated and enculturated, or does motivation and enculturation lead to improved vowel perception? Although all these questions cannot be answered here, it is the hope of this researcher that this study can suggest pathways into follow-up experiments and fieldwork investigations.

Social Factors:

RQ1a. Will study abroad students learning French accommodate to ambient speech patterns during their study abroad program and acquire the nasal vowel perception patterns of the dialect of their host community in Paris?

The answer to RQ1a is a partial 'yes.' In light of a perception experiment carried out in this study, a majority of participants increased in their nativelike accuracy in the perception of Parisian nasal vowels. This improvement correlated with positive attitudes toward Parisians. There were also some commonalities among those who were less successful in acquiring the nativelike nasal vowel perception patterns. For instance, those students who improved less tended to have lived in dormitories, a learning context commonly associated with less or lower-quality target language input. These participants also had lower proficiency and spent more time interacting with other English speakers than their peers. These results mirror findings reported in the literature. For instance, citing Gambi & Pickering (2013),
Trofimovich (2013) proposes that the greatest interactive alignment in L2 learners of pronunciation occurs when perceived and actual similarity between interlocutors is high, and that this similarity can involve the extent to which the speakers interact. In short, aligning socially with interlocutors can be expected to lead to linguistic alignment as well.

RQ1b. What are students' beliefs about the local community and its language? How do these affect (if at all) their motivation to improve the proficiency and accuracy of their spoken French?

Students' beliefs about the local community and its language varied, and depended, in part, on frequency of exposure to the French language, living arrangement, and positive attitudes toward Parisians. In their interviews and questionnaires, students spoke about how much they loved the city of Paris, but they also spoke about how difficult it was to have positive interactions with the locals unless they got to know them well, particularly by living in host families. Most participants conceded that Parisians were more reserved rather than rude, as the stereotype predicted, but they did not find it desirable to act like a Parisian. Participants could improve in their overall language proficiency in the absence of positive opinions of and time spent with Parisians. However, those who improved in their local nasal vowel perception most often had positive opinions of Parisians and had spent more time with them. This result contributes to the findings of Isabelli-Garcia (2006), adding evidence that social connectedness with a host community can contribute to linguistic gains.

Learner Factors:

RQ2a. Will study abroad students with a strong ideal self motivation towards the local community acquire the dialect-specific nasal vowel perception patterns more accurately than students with lower ideal self motivation studying in the same environment?

Those students with a higher ideal L2 self motivation prior to study abroad, and those with higher opinions of Parisians prior to study abroad, acquired nasal vowel perception patterns less than their peers did. This could speak to disillusionment with the idealized view of Paris they had prior to arriving in France

and being confronted with the reality of Paris they encountered during study abroad. However, those who reported a higher opinion of Parisians after study abroad showed greater increases in nativelike perception. Overall level of motivation did not appear to correlate on its own with increasing nativelike nasal vowel perception, but those who were more motivated after study abroad were those with the most nativelike nasal vowel perception. This finding adds to the work of Dörnyei and Ushioda (2009), suggesting that language acquisition could be connected to changes in motivation over time.

RQ2b. What other factors (such as proficiency or contact with native speakers) affect the acquisition of nasal vowel perception?

Those students who had the highest reading and writing proficiency scores and who reported spending the most time reading and speaking in French had more nativelike nasal vowel perception than their peers. Believing that they behaved like Parisians was also positively correlated with more nativelike nasal vowel perception. Students who lived in dormitories and in host families did successfully acquire nativelike local nasal vowel perception; however, staying with a host family also led to more reported contact hours with the French language and more positive attitudes toward Parisians. This is consistent with the findings of Di Silvio, et al. (2014) that enjoyable homestay placements can have a positive impact on language learning. Importantly, the raw scores in proficiency and motivation were less predictive of nativelike vowel perception than were changes in these scores over the course of the study abroad experience. Speaking English was strongly negatively correlated with developing nativelike perception patterns.

Limitations

This study has several important limitations that point to the need for further research. First, the small number of participants renders inferential statistical modeling impossible for the factors contributing to nasal vowel perception accuracy. The reported correlations are indicative, but cannot be evaluated for statistical significance because of the small sample size. Results should, therefore, be interpreted as tendencies. Second, it must be pointed out that correlations are not necessarily causation. It could be that those participants with better phonological ability had greater success communicating from the start, gained more confidence, and consequently sought out more intensive contact with their host community. However, multilingualism and typological closeness of phonologies, were not among the contributing factors. For two participants, Zendo and Amy, the fact that they both spoke Hindi could have been an additional contributing factor in developing accurate local nasal vowel perception, since Hindi also has phonemic nasal vowels. However, both of these participants developed less nativelike Parisian nasal vowel perception after a semester abroad, so the influence of Hindi does not appear to have provided an advantage in this aspect.

Instruments used in this study also led to some limitations. The Language Contact Profile could benefit from a few alterations when it is used in future research in study abroad, both in the instrument itself and in its administration. There was a broad range of responses for most of the items on the LCP that were extracted for analysis in this dissertation. One source of confusion may have been the words “outside of class” in some of the items. It was unclear whether the hours reported for these activities were meant to include time spent doing homework, and this will need to be changed for future version of the questionnaire. While informative, this questionnaire may suffer from the bias of selective memory, since it was

filled out when the students returned to their home campus in the US, up to three months after the end of the study abroad program. Future research would benefit from asking these questions while students are still abroad, as well as including questions about social media use.

The Elicited Imitation Test (EIT) had some notable limitations, in that it simultaneously omitted the social and interactive factors of language use while also being sensitive to human fallibility in its ratings. For this instrument to be more effectively employed in future research, raters would need to be trained more thoroughly and the rating categories would need to be more precise. In fact, it would be preferable to conduct Oral Proficiency Interviews (OPI's) in the future, both to admit the social and interactive elements inherent to language proficiency and to make the study more comparable to others in the field that often use OPI's. Furthermore, official OPI interviewers undergo rigorous training and are subject to reliability constraints, both of which would be impossible for an individual researcher to replicate when training raters for an EIT.

Participant interviews proved very rich, and they merit a more thorough and systematic qualitative analysis than could be performed for this study. Since the illustrative quotes were drawn mainly from specific interview questions, it is possible that subtler information about the students' experiences of life in Paris would emerge from other sections of the interviews. This more thorough analysis would benefit from the addition of a second researcher and more systematic coding of the transcripts for better reliability. In addition, to better apply the framework of the figures of personhood, future study would necessitate a deeper and more nuanced accounting of how the participants define what it means to be Parisian, French, and European. Due in part to the limited qualitative dataset that was included, and the focus on Paris in the interviews, it is likely that the participants had more

elaborate conceptions of figures of personhood tied to Paris, France, and Europe than the relatively simplified ones that emerged in this study.

Implications for Study Abroad Programs

Results of this study may lead to several concrete applications for the acquisition of authentic local speech patterns in study abroad settings. Several steps could be taken to facilitate the learning of the highest accuracy in the perception of local speech patterns, starting with fostering realistic yet positive expectations among the students. It is well-advised for programs to help students imagine themselves in the host community (helping them to build an identity as members of the community) while managing unrealistic expectations. Students in this study who had positive attitudes toward Parisians *before* going to Paris were not necessarily the ones who acquired nativelike nasal vowel perception. These students also did not necessarily maintain their positive attitudes toward Parisians after the program, which is evidence of disappointment or disillusionment in their host community. Study abroad programs could mitigate this by more proactively attending to students' changing perceptions of their host communities throughout the trajectory of their time abroad.

Study abroad programs can also encourage and actively prepare students to have positive, in-depth engagement with the host community while studying abroad. For instance, they could require credit-bearing, immersive tasks that oblige students to leave the dormitories and participate in community events. For example, students spoke fondly of a course where they learned about art both in class and in local museums. In the program that was the focus of this study, a one-credit course was offered by a graduate assistant, wherein students were required to give presentations in French about activities they had done. Though an excellent idea in principle, some participants chose to talk about their travel outside

France, meaning that the only French-language practice the assignment required in the end was the presentation itself.

Students in this study abroad program were given the option to participate in internships for course credit, which proved stressful and frustrating for some of them. The only internship where students did not have to apply on their own was as an assistant in low-income middle school English classes. Two participants, Clare and Amy, took advantage of this opportunity. Though undoubtedly useful for their cultural exposure, this internship did not oblige an advanced usage of the French language. Other students who wanted to participate in internships were told that they needed to find the organizations or companies on their own and that program staff would be willing to help with their application dossiers. For students uncertain of their French language abilities and unfamiliar with the system of internships and hiring in France, this process proved too daunting and none of the students in this group ended up working or volunteering as interns. This is an area that could be improved upon.

As in the above example with the internships, facilitating student participation in the host community could require additional linguistic and cultural scaffolding. It could be beneficial to offer context-specific "survival French" instruction as part of the orientation process. To provide another example, when the researcher met with students for the focus group interviews, she offered to take them to their favorite café in the neighborhood. This was unexpectedly problematic, as none of the participants reported having eaten in the local cafés. Instead, students would routinely order sandwiches from a kiosk and eat in the park across the street. Upon further questioning, it emerged that the students avoided eating in local cafés, preferring American fast food chains like Starbucks or McDonald's for indoor dining, because they didn't know how to ask for the Wi-Fi password. For students already overwhelmed by being in an unfamiliar place, seemingly simple language barriers of this

nature can have farther-reaching consequences for integration in the host community. Study abroad programs can therefore work to identify and fill such gaps in order to facilitate greater language learning and cultural exposure.

Finally, while these participants reported having made lifelong friends with others in their program, this same togetherness could become a concern for their language development if it leads to an increased amount of time speaking English. Programs could encourage students to engage with the French language as much as possible, even while together with other English speakers.

Future Research

This study contributes to previous research in several ways. First, it tends to corroborate that study abroad students' motivations and identities can vary greatly among participants and at different stages in the study abroad process, and that these factors can affect gains in target language proficiency (Dörnyei & Ushioda, 2009; Isabelli-Garcia, 2006). Second, it demonstrates that study abroad students can improve their phonological representations and listening skills in the target language (Llanes & Muñoz, 2009). Third, it shows that students are able to acquire fine-grained phonetic contrasts present in their local host communities (Nicholas et al., in preparation, 2014a, 2014b). More importantly, it suggests a complex interplay between these factors that, together, contribute a richer understanding of language acquisition in the study abroad context.

One goal of this study was to initiate the development of a user-friendly battery of questionnaires that could be used by study abroad programs to track the progress of their students as it concerns their connections with the host community. For this end, the following proposals were made (Appendix E). Whenever possible, questionnaires should be digitized and made available online to minimize the cost and logistical complication of administering

them in person and on paper. They should also be administered as soon as possible after the study abroad program, or even during it, to better control for the effect of memory on recalling the details of daily life abroad.

The existing Ideal L2 Self Questionnaire, Attitudes and Motivations Test Battery, Language Experience and Proficiency Questionnaire, and Language Contact Profile (Dörnyei & Ushioda, 2009; Freed et al., 2004; Gardner, 1985b; Marian et al., 2007) were truncated to include only those items that showed either a strong or weak correlation with the acquisition of nativelike local nasal vowel perception as demonstrated by this study. In this way, it would be possible to shorten the amount of time needed both to administer and analyze the questionnaires. It would also make them easier to administer electronically or remotely. Additionally, references to social media were added to the language contact questions to more accurately reflect the students' activities. These items will need to be updated in the future as new social media platforms emerge and old ones fall out of favor. An additional item, "Where were your host parents from?" was added to the Language Contact Profile, as were two open-ended questions that could be informative for program development in the future.

It is recommended that educators continue to monitor proficiency in listening, speaking, reading, and writing, since improvements in these skills were shown to occur in the absence of the development of nativelike dialectal feature perception. Although instructive for the purpose of understanding students' confidence as language learners, students' self-assessment of their target language proficiency was unreliable as a tool for the quantitative measurement of proficiency. The Elicited Imitation Test and cloze test used in the present study were once again included in the amended questionnaire (Gaillard, 2014a; Gaillard & Tremblay, 2016; Tremblay & Garrison, 2010). It would be possible for these two instruments to be administered remotely through the internet as well, provided that the students are

warned that their grades will not be impacted by their scores and that cheating will therefore not do them any favors.

To further confirm or complicate the results of this study, it needs to be repeated with more participants and in different locations. Specifically, a comparative study in Saguenay-Lac-Saint-Jean, Quebec, would be informative. This community is peripheral in the Francophone world, compared to the centrality of Paris, and it is the community of origin for the other (non-Parisian) stimulus speaker in the nasal vowel perception experiment. If a pattern is established where attitudes toward this second host community correlate with nativelike nasal vowel perception on the part of study abroad participants, the study could then be repeated in other study abroad settings. It is the hope of the researcher that this line of inquiry will assist in developing a holistic theoretical framework for better understanding how language learning and cultural alignment interact.

APPENDIX A: PROFICIENCY TESTS

Elicited Imitation Test sentences from Gaillard (2014)

The fifty EIT sentences are presented as follows:

1. the sentence is written in French
2. a word-to-word translation in English is provided
3. a global English translation is given

The French sentences in *italic* are the ones that have been adapted from Ortega et al.'s (2002) study.

Legend: *neg* = negation; *def=definite; masc=masculine; fem=feminine; art=article; pr=pronoun; ref=reflexive; pl=plurial*

Sentence #1.
Est-ce que tu penses que je dois me faire couper les cheveux?
Is it that you think that I should myself make cut the hair?
Do you think I should get a haircut?

Sentence #2.
Le livre rouge n'était pas sur la table
The book red *neg* was not on the table.
The red book was not on the table.

Sentence #3.
Dans cette grande ville les rues sont larges.
In this big city the streets are wide.
This big city has wide streets.

Sentence #4.
Il prend une douche tous les matins à 7h00.
He takes a shower all the mornings at 7 o'clock.
He takes a shower every morning at 7 o'clock.

Sentence #5.
Qu'est-ce que tu as dit que tu faisais?
What is it that you have said that you were doing?
What did you say you were doing?

Sentence #6.
Je doute qu'il sache si bien conduire.
I doubt that he knows (*subjunctive*) so well to drive.
I doubt he can drive that well.

Sentence #7.
Après le déjeuner, as-tu fait une bonne sieste?
After *article-def-masc* lunch have you done a good nap?
Did you have a peaceful nap after lunch?

Sentence #8.
Il est possible qu'il pleuve des cordes.
It is possible that it rains (*subjunctive*) some strings.
It may rain cats and dogs.

Sentence #9.
Je n'aime pas les films qui sont à l'eau de rose.
I *neg* like not the movies that are of the water of rose.
I don't like movies with sentimental endings.

Sentence #10.
Les maisons sont très belles mais trop chères.
The houses are very beautiful but too expensive.
The houses are very beautiful but too expensive.

Sentence #11.
Le petit garçon dont le chaton est mort hier est triste.
The little boy, whose *art-def-masc* kitten is dead yesterday, is sad.
The little boy, whose kitten died yesterday, is sad.

Sentence #12.
Ce restaurant est sensé avoir de la très bonne nourriture.
This restaurant is supposed to have of the very good food.
This restaurant is supposed to have very good food.

Sentence #13.
Je veux une belle et grande maison dans laquelle mes enfants puissent vivre.
I want a beautiful and big house in which my children can live.
I want a big, beautiful, house in which my children can live.

Sentence #14.
Tu aimes écouter la musique techno, n'est-ce pas ?
You enjoy to listen the music techno, *neg* is it not?
You enjoy listening to techno music, don't you?

Sentence #15.
Est-ce qu'elle vient de finir de peindre l'intérieur de son appartement?
Is it that she comes to finish to paint the inside of her apartment?
Did she just finish painting the inside of her apartment?

Sentence #16.
Traverse la rue au feu et puis continue tout droit!
Cross (*imperative*) the street at stop light and then continue straight ahead.
Cross the street at the stop light and then continue straight ahead.

Sentence #17.
La personne avec qui je sortais n'avait pas un grand sens de l'humour
The person with whom I was going out *neg* had not a big sense of *art-def-masc* humor.
The person I was dating did not have much of a sense of humor.

Sentence #18.
Elle commande uniquement des plats de viande et ne mange jamais de légumes.
She orders only some dishes of meat and *neg* eats never some vegetables.
She only orders meat dishes and never eats vegetables.

Sentence #19.
Vous pensez que le prix des maisons en ville va redevenir abordable?
You think that the price of houses in city will again become affordable?
Do you think that the price of the houses in the city will become affordable?

Sentence #20.
J'espère que le temps se réchauffera plus tôt cette année.
I hope that the weather *pr-ref* will warm more soon this year.
I hope it will get warmer sooner this year.

Sentence #21.
Une bonne amie à moi s'occupe toujours des trois enfants de mon voisin.
A good friend of mine *pr-ref* takes care always of three children of my neighbor.
A good friend of mine always babysits my neighbor's three children.

Sentence #22.
La chatte que tu as nourrie hier était celle de ma voisine.
The cat (*female*) that you have fed yesterday was that of my neighbor.
The cat that you fed yesterday belongs to my neighbor.

Sentence #23.
Avant de pouvoir aller dehors, il doit finir de ranger sa chambre
Prior to able to go outside, he must finish to clean his room.
Before he can go outside, he has to finish cleaning his room.

Sentence #24.
Je ne me suis jamais autant amusée que lorsque je suis allé à la patinoire
I *neg* myself am never as much entertained as when I have gone to the skating rink.
The have never had as much fun as I did when I went to the skating rink.

Sentence #25.
La police a arrêté le terrible voleur qui était grand et mince.
The police have caught the terrible thief who was tall and thin.
The police caught the terrible thief who was tall and thin.

Sentence #26.
Auriez-vous la gentillesse de me passer le livre qui est sur la table ?
Would have you the kindness to me give the book which is on the table?
Would you be so kind as to hand me the book which is on the table?

Sentence #27.
Le nombre de fumeuses en France ne cesse d'augmenter chaque année.
The number of smokers (*female*) in France *neg* stop to increase every year.
The number of female smokers in France has been increasing every year.

Sentence #28.
Excusez-moi, savez-vous si le train de 11h30 a déjà quitté la gare?
Excuse me, know you if the train at 11:30 am has already left the station?
Excuse me, do you know if the 11:30 train has left the station yet?

Sentence #29.
L'examen n'était pas aussi difficile que celui de Monsieur Durand en cours de littérature.
The exam *neg* was not as difficult as the one by M. Durand in class of literature.
The exam wasn't as difficult as the one given by M. Durand in literature class.

Sentence #30.
Y-a-t-il beaucoup de gens qui ne mangent rien le matin?
There-are-phonetic-filler-it a lot of people who *neg* eat nothing the morning?
Are there a lot of people who don’t eat anything at all in the morning?

Sentence #31.
Marie, prenez votre courage à deux mains et vous verrez que cet entretien passera comme une lettre à la poste!
Marie take your courage in two hands and you will see that this interview will go as a letter to the post office.
Marie, work up your courage, and you will see that this interview will go off smoothly.

Sentence #32.
Les étudiants sortant de l'université avec un Master en poche ont plus de chance de trouver un travail que les autres.
The students leaving the university with a Master's degree in pocket have more of chance to find a job than the others.
The students with a Master's degree in hand have a better chance of getting a job than the others.

Sentence #33.
Quand Sophie reçut sa collègue elle lui proposa du thé.
When Sophie received her colleague she her offered some tea.
When Sophie invited her colleague over, she offered her some tea.

Sentence #34.
N'êtes-vous pas fatigués après ce voyage en voiture de trois jours?
Neg are you *(pl)* not tired *(pl)* after this trip in car of three days?
Aren't you tired after this long three-day road trip?

Sentence #35.
Ce sont eux qui l'ont organisé l'an dernier à l'université de l'Illinois
It are they who it have organized the year former at the University of *art-def-masc* Illinois.
They were the ones who organized it last year at the University of Illinois.

Sentence #36.
Ni lui ni moi ne les avions comprises!
Neither he nor I not them had understood!
Neither he nor I understood them!

Sentence #37.
Plus elle se dépêchait dans son travail, moins elle réalisait un travail de qualité.
More she herself hurried in her work, less she made a work of quality.
The faster she worked, the worse the quality of her work was.

Sentence #38.
Elle a décidé de suivre des études d'arts plastiques à l'école des Beaux-Arts.
She has decided of follow some studies of arts plastic to the school of beautiful art.
She decided to study Fine Arts at the "École des Beaux-Arts."

Sentence #39.
On en avait une petite noire qui s'appelait minouche.
We of had a little *(female)* black that itself called minouche.
We used to have a little black cat who was called Minouche.

Sentence #40.
Dès que la présidente eut signé le document, son secrétaire l'emporta.
As soon as the president (*female*) signed the document, her (*male*) secretary it took.
As soon as the president signed the document, her secretary carried it away.

Sentence #41.
Dès que l'on aura dîné, on regardera attentivement le documentaire sur France 3.
As soon *as phonetic-filler* we have dined, we will watch attentively the documentary on France3.
As soon as we have finished dinner, we will watch the documentary on France 3 attentively.

Sentence #42.
Laura et Julie, ce sont elles qui viennent de finir de décorer élégamment la chambre d'amis.
Laura and Julie, it are them who come to finish to decorate elegantly the room of friends.
Laura and Julie are the ones who just finished decorating the guest room elegantly.

Sentence #43.
On vient juste de rentrer du supermarché où les promotions étaient particulièrement intéressantes.
We come just to come back from the supermarket where the sales were particularly interesting.
We just came back from the supermarket, where the sales were very interesting.

Sentence #44.
Il est possible que ses parents soient arrivés en France avant le début de la guerre d'Algérie.
It is possible that his parents were arrived in France before the beginning of the war of Algeria.
His parents might have arrived in France before the beginning of the Algerian war.

Sentence #45.
Gabriel, en épousant sa patronne a fait d'une pierre deux coups.
Gabriel in marrying his boss has made of one stone two bangs.
By marrying his boss, Gabriel killed two birds with one stone.

Sentence #46.
Ne penses-tu pas que les réalisatrices du film souhaiteraient lire les scénarios le plus tôt possible?
Neg think you not that the directors *(female)*of the movie would wish to read the screenplays as soon as possible?
Don't you think the film directors would like to read the screenplays as soon as possible?

Sentence #47.
Nous aurions dû faire des réservations avant d'aller au théâtre.
We must *(past)* do some reservations before to go to theater.
We should have made reservations before going to the theater.

Sentence #48.
Prenons deux semaines pour visiter New York pendant les vacances d'été!
Take *(imperative-we)* two weeks to visit New York during the vacation of summer!
Let's take two weeks off to visit New York during the summer break!

Sentence #49.
Qu'allez-vous faire demain soir après lui avoir dit la vérité?
What go you do tomorrow evening after him have said the truth?
What will you do tomorrow evening after you tell him the truth?

Sentence #50.
Les étudiantes Laure et Stéphanie vont continuer à l'étudier à l'université de Montréal.
The students Laure and Stéphanie will go to continue to it to study at the University of Montréal.
The students Laure and Stéphanie will continue to study it at the University of Montréal.

Additional sentences with nasal vowel target words:

Sentence #51.
Il n'aime pas du tout les sandwiches au thon.
He *neg* likes of all the sandwiches at tuna.
He does not like tuna sandwiches at all.

Sentence #52.
C'était à la piscine où nous avons passé beaucoup de temps.
It is (*past*) at the pool where we have passed much of time.
It was at the pool where we spent a lot of time.

Sentence #53.
Elle est allée à la boulangerie pour acheter du pain.
She *(past)* goes to the bakery to buy of bread.
She went to the bakery to buy some bread.

Sentence #54.
Quand j'arrive au parc, je vais m'asseoir sur un banc.
When I arrive at the park, I am going to myself sit on a bench.
When I arrive at the park, I am going to sit on a bench.

Sentence #55.
Pour aller à la cathédrale de Notre Dame, il faut traverser le pont.
To go to the cathedral of Notre Dame, it must cross a bridge.
To go to the Notre Dame cathedral, one must cross a bridge.

Sentence #56.
Au marché, tu peux acheter des cadeaux faits à la main.
At the market, (*sing. inf.)* you can buy some gifts made at the hand.
At the market, *(sing. inf.)* you can buy some handmade gifts.

Cloze proficiency test by Tremblay and Garrison (2010)

Test

DIRECTIVES

1. Lisez le passage au complet pour avoir une idée du sens du texte.
2. Écrivez le mot qui correspond à chaque espace blanc. ATTENTION : il n'y a qu'<u>un mot</u> par espace blanc.

EXEMPLE: Il est tombé mais ne s'est pas ___***fait***___ mal.

"Le taux de CO_2 dans l'atmosphère augmente plus vite que prévu"

La croissance économique mondiale _(1)____ provoqué un accroissement de _(2)____ teneur en dioxyde de _(3)____ (CO_2) dans l'atmosphère beaucoup _(4)____ rapidement que prévu, selon une étude _(5)____ lundi dans les comptes rendus de l'Académie _(6)____ des sciences des États-Unis.

Cette étude _(7)____ que la concentration des émissions _(8)____ gaz carbonique dans l'atmosphère a _(9)____ de 35 % en 2006, entre le début _(10)____ années 1990 et les _(11)____ 2000-2006, passant de 7 à 10 milliards de tonnes _(12)____ an, alors que le protocole de Kyoto prévoyait _(13)____ en 2012, ces émissions responsables _(14)____ réchauffement climatique devaient _(15)____ baissé de 5 % par _(16)_____ à 1990. « Les améliorations dans l'intensité carbonique de l'économie _(17)_____ stagnent depuis 2000, après trente _(18)_____ de progrès, ce qui a provoqué cette _(19)_____ inattendue de la concentration de CO_2 _(20)_____ l'atmosphère », indique dans _(21)_____ communiqué le British Antarctic Survey, _(22)____ a participé à cette étude.

_(23)____ les chercheurs, les carburants polluants _(24)____ responsables de 17 % de cette augmentation, _(25)____ que les 18 % restant sont _(26)____ à un déclin de la capacité des « puits » naturels comme _(27)____ forêts ou les océans _(28)____ absorber le gaz carbonique. « _(29)_____ y a cinquante ans, pour chaque tonne de CO_2 émise, 600 kg _(30)_____ absorbés par les puits naturels. _(31)_____ 2006, seulement 550 kg par tonne ont été _(32)_____, et cette quantité continue à baisser », explique _(33)____auteur principal de l'étude, Pep Canadell, du Global Carbon Project. « La baisse de l'efficacité _(34)_____ puits mondiaux laisse _(35)____ que la stabilisation de cette _(36)____ sera encore plus _(37)____ à obtenir que ce que l'on pensait jusqu'à _(38)____», indique pour sa _(39)____ le British Antarctic Survey.

Ces _(40)____ obligent à une révision à la hausse _(41)____ prévisions du Groupe intergouvernemental d'experts _(42)____ l'évolution du climat qui, dans son _(43)____ de février, tablait sur l'augmentation de la température _(44)____ de la terre de 1,8 °C à 4 °C _(45)____ l'horizon 2100.

Response Rubric

Scoring is binary. Words in the "exact" and "acceptable" columns receive one point. Blank responses, responses in the "unacceptable" column, and any other response receive zero points.

#	Exact	Acceptable	Unacceptable
1	a	à	avait, est, était, peut, qui, se
2	la		concentration, du, gaz carbonique, haute, le, le gaz, pollution, quel, sa, taux, trop, un, va
3	carbone	carbonne	carbon, carbonique, carbon dioxide, charbon, chose, gaz, la, l'air, le, oxygène, taux, vapeur
4	plus		augmenté, ce, de, du, très
5	publiée	ce, parue, présentée, scientifique, sortie	à, annoncée, apparaissant, apparue, cet, citée, de, d'ici, discutée, donne, d'écrit, émise, en, et, fait, faite, imprimée, le, pour, publi, publie, qui était publiée, scolaire, sur
6	nationale	officielle	à, américaine, atmosphérique, climatique, économique, environnementale, française, ici, internationale, monde, mondiale, officile, pour, première, royale, scientifique, supérieure, université
7	souligne	affirme, conclut, constate, démontre, dit, explique, indique, montre, rapporte, révèle, signale, suggère	a, apprend, avertit, ce, de, déclare, démonstré, disait, écrit, est, était, importante, montait, monte, parle, pense, pour, prétend, prévu, provoque, prouve, remarque, scientifique, trouvait, trouve, veut, voyais
8	de		de la, du, en, est, pour
9	augmenté	progressé	aggrandi, aggrandit, assez, atteint, augment, augmente, baissé, changé, élevé, été, eu, grossi, grossit, haussé, levé, mesuré, moins, monté, peu, plus, près, vers
10	des		d', dans, de l', depuis, en, les, pendant, plusieurs, pour, quelques
11	années		ans, entre, pendant, suivantes
12	par		chaque, d', polluants, qu', tout, un, une
13	qu'		ça, cela, CO2, d', finalement, il, jusqu', le mort, moins, que, qui, passer, pendant, plus, pour, puis, réduction, trouver, trop
14	du		au, de, est, et, grossissait, le, pour, pourrait, serait, seront

15	avoir		a, à, accomplit, au moins, en, est, était, être, faire, la, le, ont, mais, moins, plus, prévu, que, sera, si, très, une
16	rapport	comparaison	an, année, comparisson, contre, décennie, jour, là, milliard, mois, personne, tonne
17	mondiale	globale, internationale	a, a été, américaine, déjà, en, est, étaient, était, état, industrielle, ont, qui, reste, se, sont, y
18	ans	années	jours, mois, percent, semaines
19	croissance	augmentation, crise, hausse, montée, teneur	accroissement, action, agrandissement, amélioration, année, attitude, augmente, baisse, catastrophe, chose, conséquence, découverte, émission, étude, grande, grosse, haussement, intensité, l', quantité, période, progrès, problème, réchauffement, résultat, situation, temps, vrai
20	dans		à, d', de, en, sur
21	un	son	accroissement, ce, cette, est, la, laquelle, le, par, sa, va, une
22	qui		elle, étudiants, il, on, que, sont
23	Selon	Pour	À, Alors, Après, Avec, Chez, Dans, D'après, De, Disent, Par, Parmi, Pendant, Plus, Suivant, Tous, Toutes
24	sont	seraient	étaient, ont, plus, soient
25	tandis	alors	ainsi, aussi, bien, ce, choses, disent, en, et, indiquent, les, mais, même, moins, parce, pendant, plus, pour, précisent, puis, tant, tel
26	dus	accordés, attribuables, attribués, liés	à cause d', absorbés, allés, après, arrivés, augmentés, aussi, baissés, bien, commencés, contribuant, dans, disposés, envers, évidence, face, favorables, grâce, haut, là, maintenant, parce qu', que, prêts, prévus, regardés, responsables, restés, sujets, venus
27	les		ces, dans, de, des, en, qui
28	à	d'	et, est, ils, par, peut, peuvent, pour, pouvant, puisse, qu', que, qui, sont, va, vont
29	Il		l'environnement
30	étaient		a, de, est, été, fut, ont, ont été, présent, qu', que, qui, qui sont, sont, tonnes
31	En		À, Dans, Depuis, Pendant

32	absorbés		absorbe, a absorbés, augmentés, baissés, changés, consommés, détruits, émis, ici, préservés, restant
33	l’		à, de l’, le, par, un
34	des		à, a, de, du, émission, en, est, le, les, que
35	penser	croire, entendre, entrevoir, présumer, prévoir, supposer	ainsi, augmentation, ce, cette, constater, craindre, dire, évident, et, faire, important, indique, l’efficacité, l’émission, moins, montrer, paraître, parce, plus, pour, quoi, possible, savoir, sûr, tomber, voir, vraiment
36	concentration	augmentation, croissance, hausse, quantité	affaire, an, année, absorption, atmosphère, baisse, capacité, carbon, change, chiffre, chute, crise, effet, efficacité, émission, époque, étude, information, montrer, phénomène, polluant, pollution, problème, projet, puit, situation, tendance, teneur, utilisation
37	difficile	dure, importante, longue, nécessaire	efficace, essentielle, facile, fort, important, improbable, mal, proche, qu’, que, réduit, vite, vrai
38	présent	aujourd’hui, maintenant	avant, auparavant, but, ça, ce que, émission, hier, ici, là, lundi, moment, nous-mêmes, prévu, récemment, temps, 2006
39	part		auteur, compte, communiqué, étude, justification, magazine, parte, personne, position, projet, rapport, recherche, société, travail
40	résultats	analyses, chiffres, conclusions, constats, découvertes, données, faits, figures, informations, mesures, nombres, nouvelles, observations, renseignements	auteurs, chercheurs, choses, croissances, développements, études, événements, experts, figures, gens, hommes, idées, issues, mots, pays, paroles, personnes, problèmes, publications, qui, que, recherches, results, résumés, révélations, sont, statistiques, taux, trouvailles, trouvées
41	des		avec, de, environnement, les, pour, vitesse
42	sur	concernant, de	à, a, dans, dont, en, et, expliquent, mondiale, par, parce que, pour, que
43	rapport	analyse, annonce, article, bilan, bulletin, communiqué, discours, dossier, étude, évaluation, exposé	colloque, compte, conférence, début, déclin, étudient, jour, journal, meeting, mois, projet, publication, recherche, rendez-vous, reportage, réunion, revue, sondage, temps, travail

44	moyenne	atmosphérique, climatique, globale, thermique	actuelle, atmosphère, augmentation, augmente, baisse, basale, Celsius, chaude, chauffante, et, future, générale, grande, habituelle, haute, intérieure, milieu, mondiale, moyen, naturelle, normale, originale, plus, près, pour, selon, surface, tombe, totale, typique, vraiment
45	à	avant, pour	dans, de, devant, d'ici, degrés, en, et, envers, jusqu'à, par, sur, vers

Appendix A References

Gaillard, S. (2014). Test Specification for the Elicited Imitation Task as a new component for French placement test in institutional and research settings, Version 6.2.

Ortega, L., Iwashita, N., Norris, J., & Rabie, S. (2002, October). An investigation of elicited imitation in crosslinguistic SLA research. *Conference Handout from Paper Presented at the Meeting of the Second Language Research Forum,* Toronto, Europe.

Tremblay, A., & Garrison, M. D. (2010). Cloze tests: A tool for proficiency assessment in research on L2 French. In M. T. Prior, Y. Watanabe, & S.-K. Lee (Eds.), *Selected Proceedings of the Second Language Research Forum 2008* (pp. 73–88). Somerville, MA: Cascadilla Press.

APPENDIX B: ELICITED IMITATION TEST RATING

Elicited Imitation Task- from Gaillard (2014)

Scoring Rubric

Important things to keep in mind while grading:

- We are evaluating **ORAL PRODUCTION** by University students who are learners of French as a second/foreign language.
- The goal is to determine and specify their overall proficiency in French.
- Participants have **only one attempt to repeat** the utterance.
- They should do their best, BUT should neither rephrase nor repeat the sentence more than once.
- This is a placement test: be fair; do not be generous. Be as consistent as possible, in the interest of the reliability of the research.
- If the test-taker has not said anything (or has articulated one/some word(s), but only in English), the utterance will be given a score of 0 for each criterion. **0 = missing data OR violation of the directions**.
- If the oral production contains extra words not present in the initial sentence, but if all other words are repeated correctly, the maximum score will be 5 for each criterion, depending on the quality of the oral production.

NB: Initial sentence = sentence provided for the Elicited Imitation Task

A brief explanation of each criterion is provided below.

MEANING (the content of the message)

The content of the message can sometimes be complex. For each sentence, the rater should consider the overall content of the message. (E.g., if two ideas are expressed in the sentence, but the test-taker fails to repeat one or both of them, thenhe/she did not succeed in demonstrating complete control of this criterion for the content of this message.

SYNTAX (word order and grammatical category of the words in the sentence)

The sentence is built with a particular syntax. For each item the rater must consider the syntax globally. (E.g., Is the syntax of the question respected? Is the negation completely realized (e.g. ne+pas/point/jamais/personne/rien)? In French, articles are important, as is adjective placement.)

VOCABULARY (words that reflect the initial sentence)

A specific vocabulary is used in the elicited imitation task sentence corpus, and therefore must be used in the test-takers' oral production.

MORPHOLOGY (agreements)

This criterion is based on agreement in the French language. (E.g., gender [masculine, feminine], number [singular, plural], conjugation [tense, mood, pronouns])

PRONUNCIATION (French sounds system)

The **articulation of vowels (oral and nasal)** should be taken into consideration, as well as **liaison, elision and schwas (mute e)**. The articulation of the **final consonant should be penalized where applicable,** since it does not reflect correct French pronunciation.

The intonation (a part of prosody) is also important in the rating, particularly for questions. Segmentation is also a criterion to be kept in mind. Having taken into consideration all these (non-exhaustive) criteria for grading, the rater should also ask him/herself about **his/her**

comprehension of the sentence produced by the test-taker, with reference to pronunciation. Does the pronunciation hinder comprehension? If it does, then the grading should reflect this.

FLUENCY (pause(s), self-correction(s), hesitation (s))

This criterion helps evaluate the ease of production of the test-taker, and his/her eloquence. To what extent did the learner repeat the sentence well? Were there many hesitations?

Below, you will find the grading criteria to use. They will guide and help you in your assessment work for the elicited imitation task.

Legend for the given examples:

The crossed words in grey (E.g.,: ~~crossed words in grey~~) correspond to the words of the original sentence, which the test-taker failed to repeat.

The words in bold (E.g.: **words in bold**) correspond to the words produced by the test-taker, but which do not correspond to the ones in the original sentence.

SCORE	6	5	4	3	2	1	0
MEANING (the message content)	This oral production expresses **exactly the same meaning** as the one in the initial sentence. Ex : Le livre rouge n'était pas sur la table *We accept perfect synonyms as long as we have the meaning of the original sentence.*	This oral production expresses a **meaning very similar** to the one in the *original* sentence. One element is missing, but the general meaning of the sentence is present. Ex : Le livre rouge n'~~était~~ **est** pas sur la table Ex2 : Tu ~~aimes~~ **aimais** ~~écouter~~ la musique ~~techno~~ **technique** n'est-ce pas ? *We accept synonyms as long as we have the general meaning of the original sentence.*	This oral production expresses a **meaning that is close to** but somewhat different from the one in the initial sentence. Ex : Le livre rouge ~~n'était~~ **est** ~~pas~~ sur la table Ex2 : Le livre rouge ~~n'était~~ était sur la table Ex3 : Prenons deux semaines pour visiter ~~New~~ **nouva** York ~~pendant les vacances d'été~~. *There can be one/some misinterpretation(s), one/some incoherence, or one part of the sentence could be missing.*	This oral production expresses a **meaning that is vague** and/or globally different from the one in the initial sentence. Ex : Le livre rouge ~~n'était pas sur la table~~ *There can be some misinterpretations, some incoherence, and/ or only the **half of the sentence meaning** is present.*	This oral production expresses the **beginning of a meaning sometimes different** from the one in the initial sentence. Ex : Le livre Ex2 : ~~N'~~êtes-vous ~~pas fatigués~~ après ~~ce~~ **le** voyage [*longue pause*] ~~en voiture de trois~~ jours? *There are some misinterpretations, some incoherence; only two elements*with meaning are present.*	This oral production **does not express any meaning** corresponding to the one in the initial sentence. Ex : **liou nable**	The learner did not say anything OR started to repeat the sentence before the beep.

SCORE	6	5	4	3	2	1	0
SYNTAX (word order and grammatical category of the words in the sentence) *Density measure toward the sentence size*	This oral production contains **exactly the same syntactic structure** as the one in the initial sentence and has **no syntactic mistakes**.	This oral production contains **the syntactic structures** copied the initial sentence with **only one syntactic mistake**. Ex :~~Le~~ **La** livre ~~rouge~~ n'était pas ~~sur~~ **sous** la table. Ex2 : Le livre rouge ~~n'~~était pas sur la table. Ex3 : Tu ~~aimes~~ **aimais** ~~écouter~~ la musique ~~techno~~ **technique** n'est-ce pas ? Ex4 : N'êtes-vous pas fatigués après ce long voyage~~ en voiture de trois jours~~ de trois jours en voiture ? *(inversion)*	This oral production contains **some syntactic structures** more or less copied from the ones in the initial sentence. There is **more than one syntactic mistake**. Ex : Le livre rouge n'était pas sur la table. Ex2: Le livre rouge ~~n'était~~ **est** ~~pas~~ sur la table. Ex3 : Prenons deux semaines pour visiter ~~New~~ **nouva** York ~~pendant les vacances d'été~~. ***More than the half of the syntax*** *is repeated.*	This oral production contains **more than one/two* syntactic structure(s)** more or less copied from the ones in the initial sentence. Ex : ~~Le~~ livre ~~rouge n'était pas sur~~ **sous** la table. [nom + prép + dét + nom] Ex2 : Le livre rouge ~~n'était pas sur sous la table~~. [dét+ nom + adj] Ex3 : **je pense le faire** ~~J'espère que le temps se réchauffera plus tôt~~ cette année. *In the best case,* ***half of the syntax*** *is present.*	This oral production contains **one/two* simple syntactic structure(s)** more or less copied from the ones in the initial sentence. Ex : ~~Le livre~~ n'~~était pas sur~~ la **une** table. [dét + nom] Ex2 : Le ~~petit~~ garçon ~~dont le chaton est mort hier est triste~~ [dét + nom] *Too many things are missing.*	This oral production contains **no syntactic structure.** Ex : ~~Le livre rouge n'était pas sur la~~ table [nom] Ex2 : ~~Le~~ livre ~~rouge n'était pas sur la~~ [longue pause] table [nom + nom]	The learner did not say anything OR started to repeat the sentence before the beep.

SCORE	6	5	4	3	2	1	0
MORPHOLOGY (the agreements in gender, number, the tense and mood) *Density measure toward the sentence size*	This oral production contains **all the morphological agreements** from the initial sentence and has **no morphological mistake.** Ex : Le livre rouge n'était pas sur la table.	This oral production contains **the morphological agreements** copied from the initial sentence with **only one morphological mistake.** Ex : Le livre rouge n'était pas sur ~~la~~ **le** table.	This oral production contains **some morphological agreements** more or less copied from the initial sentence. There is **more than one morphological mistake.** Ex : Le livre rouge n'~~était~~ **est** ~~pas~~ sur la table. Ex2 : Tu ~~aimes~~ **aimais** ~~écouter~~ la musique ~~techno~~ **technique** n'est-ce pas ? Ex3 : Prenons deux semaines pour visiter **nouva** ~~New~~ York ~~pendant les vacances d'été~~. ***More than the half of the morphological elements*** *is repeated.*	This oral production contains **more than one/two* morphological agreement(s)** more or less copied from the initial sentence. Ex : ~~Le~~ **la** livre rouge n'est ~~n'était est pas~~ ~~sur~~ la table. *In the best case,* ***the half of the morphological elements*** *is realized.*	This oral production contains only **one/two* morphological agreement(s)** more or less copied from the initial sentence. Ex : ~~On vient juste de renter du supermarché où les promotions étaient~~ particulièrement ~~Intéressante~~. Ex2 : ~~Le~~ **Un** livre ~~rouge n'était est pas sur la table.~~ Ex3 : ~~Le petit garçon dont~~ le ~~chaton~~ **château** ~~est mort hier est triste.~~ Ex4 : ~~Dès que la présidente~~ le **président** ~~eu signé le document son secrétaire l'emporta.~~ *There is one morphological agreement.*	This oral production contains **no morphological agreement.** Ex : ~~Le livre rouge n'était est pas sur la~~ **le** table. Ex2 : Gabriel ~~en épousant sa patronne a fait d'une pierre deux coups~~.	The learner did not say anything OR started to repeat the sentence before the beep.

SCORE	6	5	4	3	2	1	0
VOCABULARY (words used that correspond to the initial sentence)	This oral production contains **all the words** of the initial sentence.	This oral production contains **the words** of the initial sentence with only one **vocabulary mistake.** Ex : Les étudiants sortant de l'université avec un Master en poche ont plus de chance de trouver un ~~travail~~ **emploi** que les autres. Ex2 : La police a arrêté le ~~terrible~~ **grand** voleur qui était ~~grand~~ **terrible** et mince. *(The words are switched here*) Ex3 : Ne penses-tu pas que les réalisatrices du film souhaiteraient lire ~~les scenarios~~ le plus tôt possible. (article + noun in a big sentence)	This oral production contains **some words** of the initial sentence. Ex : Excusez-moi, ~~savez-vous~~ vous savez si le train de 11h30 ~~a déjà quitté~~ **est** déjà **parti** de la gare ? Ex2 : Le livre rouge ~~n'était pas~~ sur la table Ex3 : Prenons deux semaines pour visiter ~~New~~ **nouva** York ~~pendant les vacances d'été~~. ***More than the half*** *of the original vocabulary* ***is employed.***	This oral production contains **more than two* words** of the initial sentence. Ex : ~~Le~~ livre ~~rouge n'était pas~~ sur la table. Ex2 : Le petit garçon ~~dont le chaton château est mort hier~~ est triste. Ex3 : Le petit garçon **dans** ~~dont~~ le ~~chaton~~ **château** ~~est mort hier est triste.~~ *In the best case,* ***half of the*** *original words are present.*	This oral production contains **only one or two* word(s)** of the initial sentence. Ex : Excusez-moi, ~~savez-vous si le train de 11h30 à déjà quitté la gare ?~~ Ex2 : Le livre ~~rouge n'était pas sur la table~~.	This oral production contains **none of the words o**f the initial sentence. Ex : ~~Excusez-moi, savez-vous si le train de 11h30 à déjà quitté la gare ?~~ **guerre**	The learner did not say anything OR started to repeat the sentence before the beep.

SCORE	6	5	4	3	2	1	0
PRONUNCIATION (French sound system) *Reminder :* *Take into consideration the articulation of vowels (oral and nasal), consonants, mandatory liaisons, and the degree of understanding linked to all of this.*	This oral production is **perfectly intelligible** and perfectly copied from the original sentence **without any prosodic or segmental mistake.**	This oral production contains **prosodic and/or segmental elements** copied from the original sentence. There is **only one/ two*mistake(s).** *Clearly intelligible. does not hinder comprehension despite small articulatory errors or hesitation (E.g.,: final consonants articulated)* Ex : La police a arrêté le terrible voleur qui était grand**e** et mince Ex : Le petit garçon dont le ~~chaton~~ **château** est mort hier est triste.	This oral production contains **some of the prosodic and/or segmen-tal elements** more or less copied from the original sentence. ***More than the half** of the elements **are employed.*** Ex : Avant ~~de pouvoir~~ d'aller dehors, il doit ~~finir de~~ ranger sa chambr**e**. Ex : Le petit petit**e** garçon ~~dont~~ **dans** le ~~chaton~~ **château** est mort hier est triste. Ex2 : Prenons deux semaines pour visiter ~~New~~ **nouva** York ~~pendant les vacances~~ cet été.	This oral production contains **more than two* pro-sodic and/or segmental elements** more or less copied from the original sentence. *In the best case, **half** of the elements **is present**.* Ex : Le ~~petit~~ petit**e** garçon ~~dont~~ **dans** le ~~chaton~~ **château** ~~est mort hier~~ est triste. Ex : Traversez ~~traverse~~ la rue **en** ~~au~~ feu ~~et puis continue tout droit~~. *Several difficulties concerning the sentence understanding.*	This oral production contains **only one/ two* pro-sodic and/or segmental elements** more or less copied from the initial sentence. *A lot of difficulty understanding the sentence. The repeated words are difficult to understand, due to poor phonemic articulation.* Ex : ~~Traverse~~ la ~~rue~~ **roue** ~~au feu et puis continue tout droit~~ **à** droit**e** rou**e** [u] ≠ la r**u**e [y] droite ≠ droit	This oral production **is not understandable** *The articulated phonemes **do not correspond** to the French phonological system **at all**.* Ex : **Lo rouche**	The learner did not say anything OR started to repeat the sentence before the beep.

SCORE	6	5	4	3	2	1	0
FLUENCY (speaker's ease)	This oral production copied from the initial sentence is expressed **with ease and no one hesitation nor pause.** *Note :* *Slip of the tongue e.g., 'ce' → 'cette' will not be penalized (we stay global)*	This oral production copied from the initial sentence is expressed **with ease and only one/two* hesitation(s) and/or pause(s)** or a missing word**.** There is **no break** in the sentence continuity. *The speech rhythm is slower, slightly more segmented than the one in the original sentence. The speed is not 'normal'* Ex : Tu ~~aimes~~ **ai-mais éc-ou-ter** la musique techno n'est-ce pas ? *As soon as the oral production does not exactly correspond to the initial sentence (missing or mis-pronounced word) it is penalized.*	This oral production more or less copied from the initial sentence is expressed **with ease but also with breaks** in continuity (pauses and/or hesitations and/or onomato-poeias and/or English words and/or missing words). Ex: Les étudiantes **hum** ~~Laure~~ et Stéphanie vont continuer ~~à **l'étudier**~~ à l'université de Montréal. Ex2 : Tu ~~aimes~~ **ai-mais** ~~écouter~~ la musique ~~techno~~ **technique** n'est-ce pas ? ***More than half** of the sentence is realized appropriately.*	This oral production, more or less copied from the initial sentence is expressed **with some ease but with a lot of breaks** in the sentence continuity (pauses and/or hesitations and/or onomato-poeias and/or English words insertion and/or missing words are present). Ex : Marie [**long break**] à la poste. Ex 2: Les étudiantes ~~Laure et Stéphanie vont continuer à l'étudier~~ **something something** à l'université de Montréal. ***At best, half of the sentence** is realized appropriately.*	This oral production more or less copied from the initial sentence is expressed **with little ease and with a lot of breaks** in the sentence continuity (pauses and/or hesitations and/or onomato-poeias and/or English words insertion and/or missing words are present). Ex : ~~Maire prenez votre courage à deux mains et vous verrez que cet entretien passera comme une lettre à~~ la poste. *It is difficult to assess the fluency of the oral production when the test-taker says only few words interrupted by long silences and/or mumbles*	This oral production more or less copied from the initial sentence is expressed **with a lot of difficulties and has several breaks** in the sentence continuity (pauses and/or hesitations and/or onomato-poeias and/or English words insertion and/or missing words are present). *Nothing is clearly perceptible.* *OR* *It is not possible to assess since there are not enough elements.* Ex : [**long sigh**] poste.	The learner did not say anything OR started to repeat the sentence before the beep.

Appendix B References

Gaillard, S. (2014a). Test Specification for the Elicited Imitation Task as a new component for French placement test in institutional and research settings, Version 6.2.

Gaillard, S. (2014b). The Elicited Imitation Task as a Method for French Proficiency Assessment in Institutional and Research Settings. PhD dissertation.

APPENDIX C. QUESTIONNAIRES

Attitude/Motivation Test Battery

Adapted from Gardner (1985) and Taguchi (2009)

Category headings are provided here for future data analysis, but the version of the questionnaire that participants saw did not have these headings.

The following questions are based on a 6-point Likert scale:

1 (strongly disagree) 2 (disagree) 3 (slightly disagree) 4 (slightly agree) 5 (agree) 6 (strongly agree)

1 (not at all) 2 (not so much) 3 (so-so) 4 (a little) 5 (quite a lot) 6 (very much)

Ideal L2 Self

	1 (strongly disagree) → 6 (strongly agree)
I can imagine myself living abroad and having a discussion in French.	**1 2 3 4 5 6**
I can imagine myself living abroad and using French effectively for communicating with the locals.	**1 2 3 4 5 6**
I can imagine a situation where I am speaking French with foreigners.	**1 2 3 4 5 6**
I can imagine myself speaking French with international friends and colleagues.	**1 2 3 4 5 6**
I imagine myself as someone who is able to speak French.	**1 2 3 4 5 6**
I can imagine myself speaking French as if I were a native speaker of French.	**1 2 3 4 5 6**
Whenever I think of my future career, I imagine myself using French.	**1 2 3 4 5 6**
The things I want to do in the future require me to use French.	**1 2 3 4 5 6**
I can imagine myself studying in a university where all my courses are taught in French.	**1 2 3 4 5 6**
I can imagine myself writing French emails fluently.	**1 2 3 4 5 6**

Ought-to L2 Self

	1 (strongly disagree) → 6 (strongly agree)
I study French because close friends of mine think it is important.	**1 2 3 4 5 6**

I have to study French because I think my parents would be disappointed with me if I did not study it.	**1 2 3 4 5 6**
Learning French is necessary because people around me expect me to do so.	**1 2 3 4 5 6**
My parents/family members believe that I must study French to be an educated person.	**1 2 3 4 5 6**
I consider learning French important because the people I respect think that I should do it.	**1 2 3 4 5 6**
Studying French is important to me in order to gain the approval of my peers/teachers/family/boss.	**1 2 3 4 5 6**
It will have a negative impact on my life if I do not learn French.	**1 2 3 4 5 6**
Studying French is important to me because other people will respect me more if I have knowledge of French.	**1 2 3 4 5 6**
If I fail to learn French, I'll be letting other people down.	**1 2 3 4 5 6**

Instrumentality (promotion)

	1 (strongly disagree) → 6 (strongly agree)
Studying French can be important to me because I think it will someday be useful in getting a job.	**1 2 3 4 5 6**
Studying French is important because with a high level of French proficiency I will be able to make a lot of money.	**1 2 3 4 5 6**
Studying French is important to me because French is necessary for promotion in the future.	**1 2 3 4 5 6**
Studying French is important to me because I think I'll need it later in my studies.	**1 2 3 4 5 6**
Studying French is important to me because with French I can work globally.	**1 2 3 4 5 6**
The things I want to do in the future require me to learn French.	**1 2 3 4 5 6**
Studying French is important to me because it offers a new challenge in my life.	**1 2 3 4 5 6**
Studying French is important to me in order to achieve a specific goal (e.g. to get a degree, scholarship, or promotion at work).	**1 2 3 4 5 6**
Studying French is important to me in order to attain a high social status.	**1 2 3 4 5 6**

I study French in order to keep updated and informed of recent news in the world.	**1 2 3 4 5 6**

Instrumentality (prevention)

	1 (strongly disagree) → 6 (strongly agree)
I have to learn French because I cannot get my degree if I do not pass French.	**1 2 3 4 5 6**
I have to learn French because I don't want to fail my French courses.	**1 2 3 4 5 6**
I have to study French because I don't want to get bad grades in it.	**1 2 3 4 5 6**
I have to study French. Otherwise, I think I cannot be successful in my future career.	**1 2 3 4 5 6**
Studying French is important to me because if I don't have knowledge of French I'll be considered a weak student or employee.	**1 2 3 4 5 6**
Studying French is important to me because I don't like to be considered a poorly educated person.	**1 2 3 4 5 6**
Studying French is important to me because I would feel ashamed if I got bad grades in French.	**1 2 3 4 5 6**

Attitudes toward learning French (positive and negative)

	1 (strongly disagree) → 6 (strongly agree)
Learning French is really great.	**1 2 3 4 5 6**
I like the atmosphere of my English classes.	**1 2 3 4 5 6**
I really enjoy learning French.	**1 2 3 4 5 6**
French is an important part of the school program.	**1 2 3 4 5 6**
I plan to learn as much French as possible.	**1 2 3 4 5 6**
I find learning French really interesting.	**1 2 3 4 5 6**
I always look forward to French classes.	**1 2 3 4 5 6**
I love learning French.	**1 2 3 4 5 6**
I hate French.	**1 2 3 4 5 6**
I would rather spend my time on subjects other than French.	**1 2 3 4 5 6**
Learning French is a waste of time.	**1 2 3 4 5 6**
I think that learning French is boring.	**1 2 3 4 5 6**
I would like to have more French lessons.	**1 2 3 4 5 6**
When I leave school, I shall give up the study of French entirely because I am not interested in it.	**1 2 3 4 5 6**

Cultural interest

	1 (not at all) → 6 (very much) **1 (strongly disagree) → 6 (strongly agree)**
Do you like the music of French-speaking countries (e.g. pop music)?	**1 2 3 4 5 6**
Do you like movies made in French-speaking countries?	**1 2 3 4 5 6**
Do you like French magazines, newspapers, websites, or books?	**1 2 3 4 5 6**
Do you like TV programs made in French-speaking countries?	**1 2 3 4 5 6**
If I were visiting a foreign country, I would like to be able to speak the language of the people.	**1 2 3 4 5 6**
I want to read French literature in the original language rather than a translation.	**1 2 3 4 5 6**
I would really like to learn a lot of languages.	**1 2 3 4 5 6**
If I planned to stay in another country, I would make a great effort to learn the language even if I could get by in English.	**1 2 3 4 5 6**
I would study a foreign language even if it were not required.	**1 2 3 4 5 6**
I enjoy meeting and listening to people who speak other languages.	**1 2 3 4 5 6**
Studying a foreign language is an enjoyable experience.	**1 2 3 4 5 6**

Attitudes to L2 community

	1 (not at all) → 6 (very much) **1 (strongly disagree) → 6 (strongly agree)**
French people are very sociable, warm-hearted, and creative people.	**1 2 3 4 5 6**
I would like to know more French people.	**1 2 3 4 5 6**
The more I get to know French people, the more I want to be fluent in their language.	**1 2 3 4 5 6**
French people are patient when foreigners make mistakes speaking French.	**1 2 3 4 5 6**
French people are friendly and easy to get along with.	**1 2 3 4 5 6**
French people are considerate of the feelings of others.	**1 2 3 4 5 6**
I have a favorable attitude toward French people.	**1 2 3 4 5 6**

The French people are hospitable and welcoming.	**1**	**2**	**3**	**4**	**5**	**6**
French people are cheerful, agreeable, and good-humored.	**1**	**2**	**3**	**4**	**5**	**6**
French people are very polite.	**1**	**2**	**3**	**4**	**5**	**6**
French people are very generous.	**1**	**2**	**3**	**4**	**5**	**6**
For the most part, French people are sincere and honest.	**1**	**2**	**3**	**4**	**5**	**6**
Do you like to travel to French-speaking countries/regions?	**1**	**2**	**3**	**4**	**5**	**6**
Do you like the people who live in French-speaking countries/regions?	**1**	**2**	**3**	**4**	**5**	**6**
Would you like to know more about people from French-speaking countries/regions?	**1**	**2**	**3**	**4**	**5**	**6**
How important do you think it is to learn French in order to learn more about the culture and art of its speakers?	**1**	**2**	**3**	**4**	**5**	**6**
How much would you like to become similar to the people who speak French?	**1**	**2**	**3**	**4**	**5**	**6**

Ideal Selves and Attitude/Motivation Test Battery

From MacIntyre et al (2009), Gardner (1985), and Taguchi (2009)

Instructions: Possible Selves Questionnaire

Probably everyone thinks about the future to some extent. When doing so we often think about the kinds of experiences that are in store for us. Some of these experiences are probably quite likely to occur while others are much less likely. Some of these future experiences are very much desired and hoped for while others are worried about or feared. As we think about the future, we also think about the kind of people we might become. Again, we may look forward to some of these 'future selves' but we may be quite concerned about others. In short, given the proper circumstances, we can probably all imagine a number of possible futures for ourselves in terms of the kind of people we might become, the way we might feel, or the acts we might commit. Some of these possible selves may be also achieved or quite likely to be achieved and some may only be very vague or fanciful ideals for the future. Some of us may have a larger number of 'possible selves' in mind as we think about the future while others may only have a few.

Listed below are a number of possibilities of 'future selves' that have been provided by other people. We are interested in what 'possible selves,' both positive and negative, you may have considered for yourself.

Column 1: The first question asks whether this possible self actually characterizes you right now. If it does, mark 'yes,' if not, mark 'no.'

Column 2: Next we are concerned with whether this possible self will characterize you in the future. If you think that it describes a future self, mark 'yes,' if not, mark 'no.'

Column 3: The third question asks whether you want this as a possible self for you in the future; is it desirable? If you see this possible self as very undesirable, write 1. But if you really want to achieve this possible self in the future, write 5. You can use the numbers 2 (somewhat undesirable), 3 (neutral), of 4 (somewhat desirable) to indicate how much you want to become this possible self.

Column 4: The next one asks, for you, how likely is this possible self?' If a possible self is very likely to occur in the future such that you are very certain that you will become this way, mark 'extremely likely.' If, on the other hand, you have considered this as a possibility for you, but you are very uncertain if you will become this way, mark 'extremely unlikely.' You should mark the numbers in between to indicate less extreme judgments of how often you have considered a possible self.

Column 5: The last question asks, 'how often do you think of this as a possible self for you?' If you have spent a lot of time thinking about this self as a possible future self for you, mark 'very often.' If you have not spent any time thinking about this, mark 'never.' If you have at one time or other considered this self as a possible self, use the numbers in between to indicate less extreme judgments.

Please work very rapidly on this part of the questionnaire. We are interested in your first thoughts about your future selves. Try to be honest. Do not mull over your answer- answer with the first response that comes to mind. Do not worry about contradictions, inconsistencies, or uncertainties.

Possible Selves Questionnaire

		Describes me now	***Describes possible future***	***Is this a desired or undesirable future? (1=undesired, 5=desired)***	***How likely is this in the future? (1= not likely, 5= very likely)***	***How often have you thought about this future? (1= never, 5= a lot)***
1.	Understand the views of French people	Yes | No	Yes | No			
2.	Think like French people	Yes | No	Yes | No			
3.	Be a knowledgeable person	Yes | No	Yes | No			
4.	Be a cultured person	Yes | No	Yes | No			
5.	Understand views of Parisian people	Yes | No	Yes | No			
6.	Think like Parisian people	Yes | No	Yes | No			
7.	Understand French literature	Yes | No	Yes | No			
8.	Appreciate French art and literature	Yes | No	Yes | No			
9.	Feel at ease with French people	Yes | No	Yes | No			
10.	Friendships with French people	Yes | No	Yes | No			
11.	Feel at ease with people who speak French	Yes | No	Yes | No			
12.	Friendships with people who speak French	Yes | No	Yes | No			
13.	Feel at ease with Parisian people	Yes | No	Yes | No			
14.	Friendships with Parisian people	Yes | No	Yes | No			
15.	Feel respected because I speak French	Yes | No	Yes | No			
16.	Enjoy speaking French	Yes | No	Yes | No			
17.	Want to learn many languages	Yes | No	Yes | No			
18.	Participate freely in activities of other cultural groups	Yes | No	Yes | No			

19.	Act like French people	Yes | No	Yes | No			
20.	Meet and converse with French people	Yes | No	Yes | No			
21.	Act like Parisian people	Yes | No	Yes | No			
22.	Meet and converse with Parisian people	Yes | No	Yes | No			
23.	Work at a job using French	Yes | No	Yes | No			
24.	Travel to French speaking areas/countries	Yes | No	Yes | No			
25.	Go to French films in the original language	Yes | No	Yes | No			
26.	Read newspapers, magazines, and website in French	Yes | No	Yes | No			

Language Experience Questionnaire

Questions adapted from the Language Experience and Proficiency Questionnaire (LEAP-Q) by Marian et al. (2007) and from the Language Contact Profile by Freed et al. (2004).

Pretest: Prior to study abroad semester

Part A. General Information

1. **Gender:** ☐ F ☐ M
2. **Date of Birth:** _____
3. **Place of Birth**:_____
4. **Do you have vision or hearing problems**? _____
5. **What year are you in school?** (circle one)

Freshman Sophomore Junior Senior Graduate Student Other

6. **What is your major**? _____

Part B. Known Languages and Uses

1. **Native language:** _____ **Dialect:** _____
2. **Mother's native language:** _____**Mother's place of origin:** _____
3. **Father's native language:** _____**Father's place of origin:** _____
4. **Partner's native language:** _____ **Partner's place of origin:** _____
5. **Language(s) spoken at home during childhood:** _____

   If more than one, with whom did you speak each language?

   _____
6. **Language(s) spoken at home during the first five years of your life:** _____
7. **Place of residence during the first five years of your life:** _____
8. **Language(s) of instruction during elementary school (content courses):** _____
9. **Place of residence from 6 to 11 years old:** _____

10. Language(s) of instruction during middle and high school (content courses): _____

11. Place of residence from 12 to 17 years old: _____

12. Have you visited or lived in other places where they speak a different language?

Where, when, and for how long? _____

_____

13. Have you ever traveled to a French speaking location for the purpose of language study?

Where, when, and for how long? _____

_____

14. Have you studied French in school in the past at each of the levels listed below? If yes, for how long? (Check one)

a. Elementary school: ☐No ☐Yes: ☐less than 1 year ☐1–2 years ☐more than 2 years

b. Junior high/middle school: ☐No ☐Yes: ☐less than 1 year ☐1–2 years ☐more than 2 years

c. High school: ☐No ☐Yes: ☐less than 1 year ☐1–2 years ☐more than 2 years

d. University/college: ☐No ☐Yes: ☐less than 1 year ☐1–2 years ☐more than 2 years

e. Other (Please specify): _____

☐No ☐Yes: ☐less than 1 year ☐1–2 years ☐more than 2 years

15. Other language(s) that you know (besides your native language), proficiency levels, and years of formal instruction in a school setting					
Language	Reading	Writing	Speaking	Listening	Years of formal instruction

	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	

16. Please list all languages you know *in order of dominance*.				
Most dominant → Least dominant				
17. Please list all languages you know *in the order in which you acquired them* (native language first)				
Language acquired first → Language acquired last				

18. Please list what percentage of the time you are *currently* and *on average* exposed to each language you know. (Your percentages should add up to 100%)				
Language:	Language:	Language:	Language:	Language:
Percentage:	Percentage:	Percentage:	Percentage:	Percentage:
19. When choosing to read a text available in all your languages, in what percentage of cases would you choose to read it in each of your languages? Assume that the original was written in another language, which is unknown to you. (Your percentages should add up to 100%)				
Language:	Language:	Language:	Language:	Language:
Percentage:	Percentage:	Percentage:	Percentage:	Percentage:
20. When choosing a language to speak with a person who is equally fluent in all your languages, what percentage of the time would you choose to speak each language? Please report percentage of total time. (Your percentages should add up to 100%)				
Language:	Language:	Language:	Language:	Language:
Percentage:	Percentage:	Percentage:	Percentage:	Percentage:

Part C. Usage of French

1. On average, how often did you *communicate* with native or fluent speakers of French *in French* in the year prior to the start of this program?
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily

2. Prior to this program, I tried to speak French to:
a. my instructor outside of class
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily
b. friends who are native or fluent speakers of French
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily
c. classmates
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily
d. strangers whom I thought could speak French
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily
e. a host family, if living in a French-speaking area
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily
f. service personnel eg, bank clerk, cashier:
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily

3. For each of the items below, choose the response that corresponds to the amount of time you estimate you spent on average doing each activity *in French* prior to this program.
a. watching French language television
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily
b. reading French language newspapers
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily
c. reading novels in French
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily
d. listening to songs in French
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily
e. reading French language magazines
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily
f. watching movies or videos in French
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily
g. going to a language lab, listening to practice CDs, or practicing French your own
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily
h. writing letters, emails, or other correspondence in French
☐ never ☐ a few times a year ☐ monthly ☐ weekly ☐ daily

4. List any other activities that you commonly did using French prior to this semester:

_____

_____

5. In your perception, on a scale of 1-5, how much of a foreign accent do you have in French? (circle one)

1 (strong accent) 2 3 4 5 (no accent)

Posttest- after study abroad semester

Please indicate the French language courses you took this semester:

Course name	Course number	Brief description
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

1. Which situation best describes your living arrangements in France during the past program? (check one)

a. ☐ I lived in the home of a French-speaking family.
   i. List the members of the family (e.g., mother, father, one 4-year-old daughter, one 13-year-old son): _____
   ii. Did they speak English? Circle one: Yes No
   iii. Were there other nonnative speakers of French living with your host family? Circle one: Yes No

b. ☐ I lived in a student dormitory or residence hall.
   i. ☐ I had a private room
   ii. ☐ I had a roommate who was a native or fluent French speaker.
   iii. ☐ I lived with others who are NOT native or fluent French speakers.

c. ☐ I lived alone in a room or an apartment

d. ☐ I lived in a room or an apartment with native or fluent French speakers

e. ☐ I lived in a room or an apartment with others who are NOT native or fluent French speakers

f. ☐ Other. Please specify: _____

For the following items, please specify:

i. How many *days per week* you typically used French in the situation indicated, and
ii. on average how many *hours per day* you did so
Circle the appropriate numbers

2. On average, how much time did you spend speaking, *in French*, outside of class with native or fluent French speakers during this program?

Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5

3. This program, outside of class, I tried to speak *French to*:

3a. my instructor(s)

Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
3b. friends who are native or fluent French speakers
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
3c. classmates
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
3d. strangers whom I thought could speak French
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
3e. a host family, French roommate, or other French speakers in the dormitory
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
3f. service personnel
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
3g. other; specify: _____
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5

4. How often did you use French outside the classroom for each of the following purposes?
4a. to clarify classroom-related work
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
4b. to obtain directions or information e.g., “Where is the post office?”, “What time is the train to . . . ?”, “How much are stamps?”!
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
4c. for superficial or brief exchanges e.g., greetings, “Please pass the salt,” “I’m leaving,” ordering in a restaurant, with my host family, French roommate, or acquaintances in a French speaking dormitory
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
4d. extended conversations with my host family, French roommate, friends, or acquaintances in a French-speaking dormitory, native speakers of English with whom I speak French
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
5a. How often did you try deliberately to use things you were taught in the classroom (grammar, vocabulary, expressions) with native or fluent speakers outside the classroom?
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
5b. How often did you take things you learned outside of the classroom (grammar, vocabulary, expressions) back to class for question or discussion?
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5

6. How much time did you spend doing the following *each week*?
6a. speaking a language other than English or French to speakers of that language (e.g., Chinese with a Chinese-speaking friend)
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
6b. speaking *French* to native or fluent speakers of *French*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
6c. speaking *English* to native or fluent speakers of *French*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
6d. speaking *French* to nonnative speakers of *French* (i.e., classmates)
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
6e. speaking *English* to nonnative speakers of *French* (i.e., classmates)
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5

7. How much time did you spend doing each of the following activities *outside of class*?
7a. overall, in reading in French *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7b. reading French newspapers *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7c. reading novels in French *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7d. reading French language magazines *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7e. reading schedules, announcements, menus, and the like in French *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7f. reading e-mail or Internet web pages in French *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7g. overall, in listening to French *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7h. listening to French television and radio *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7i. listening to French movies or videos *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7

On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7j. listening to French songs *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7k. trying to catch other people's conversations in French *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7l. overall, in writing in French *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7m. writing homework assignments in French *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7n. writing personal notes or letters in French *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7o. writing e-mail in French *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
7p. filling in forms or questionnaires in French *outside of class*
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5

8. On average, how much time did you spend speaking in *English* outside of class during this program?
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5

9. How often did you do the following activities in *English* during this program?
9a. reading newspapers, magazines, or novels or watching movies, television, or videos
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
9b. reading e-mail or Internet web pages in English
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
9c. writing e-mail in English
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5
9d. writing personal notes and letters in English
Typically, how many *days per week*? 0 1 2 3 4 5 6 7
On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5

10. List any other activities that you commonly did using French this semester:

_____

11. In your perception, on a scale of 1-5, how much of a foreign accent do you have in French? (circle one)

1 (strong accent) 2 3 4 5 (no accent)

a. Please rate how frequently others identify you as a non-native speaker based on your accent in French

1 (never or almost never) 2 3 4 5 (very frequently)

12. Please list all languages you know in order of dominance.				
Most dominant → Least dominant				

13. Other language(s) that you know (besides your native language), proficiency levels, and years of formal instruction in a school setting					
Language	Reading	Writing	Speaking	Listening	Years of formal instruction
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	
	☐ Beginner ☐ Intermediate ☐ Advanced	☐ Beginner ☐ Intermediate ☐ Advanced	☐ Beginner ☐ Intermediate ☐ Advanced	☐ Beginner ☐ Intermediate ☐ Advanced	

	☐ Near-native	☐ Near-native	☐ Near-native	☐ Near-native	
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	

14. Please list what percentage of the time during your semester abroad you were *on average* exposed to each language you know. (Your percentages should add up to 100%)				
Language:	Language:	Language:	Language:	Language:
Percentage:	Percentage:	Percentage:	Percentage:	Percentage:
19. When choosing to read a text available in all your languages, in what percentage of cases would you choose to read it in each of your languages? Assume that the original was written in another language, which is unknown to you. (Your percentages should add up to 100%)				
Language:	Language:	Language:	Language:	Language:
Percentage:	Percentage:	Percentage:	Percentage:	Percentage:

20. When choosing a language to speak with a person who is equally fluent in all your languages, what percentage of the time would you choose to speak each language? Please report percentage of total time. (Your percentages should add up to 100%)				
Language:	Language:	Language:	Language:	Language:
Percentage:	Percentage:	Percentage:	Percentage:	Percentage:

Appendix C References:

Freed, B. F., Dewey, D. P., Segalowitz, N., & Halter, R. (2004). The Language Contact Profile. *Studies in Second Language Acquisition*, *26*, 349–356.

Gardner, R. C. (1985). *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London: Edward Arnold.

MacIntyre, P. D., Mackinnon, S. P., & Clément, R. (2009). Chapter 10. Toward the Development of a Scale to Assess Possible Selves as a Source of Language Learning Motivation. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, Language Identity and the L2 Self* (pp. 172–192). Tonawanda, NY: Multilingual Matters.

Marian, V., Blumenfeld, H. K., & Kaushanskaya, M. (2007). The Language Experience and Proficiency Questionnaire (LEAP-Q): Assessing Language Profiles in Bilinguals and Multilinguals. *Journal of Speech, Language, and Hearing Research*, *50*, 940–967.

Taguchi, T., Magid, M., & Papi, M. (2009). Chapter 4. The L2 Motivational Self System among Japanese, Chinese, and Iranian Learners of English: A Comparative Study. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, Language Identity and the L2 Self* (pp. 66–97). Tonawanda, NY: Multilingual Matters.

APPENDIX D: SEMI-STRUCTURED INTERVIEW QUESTIONS

These questions were used as prompts. The researcher asked follow-up questions depending on the participants' responses.

At the beginning of the study abroad program

1. Why did you decide to study abroad in Paris?
2. What do you expect it will be like living with Parisians?
3. How do you think your life might be different after this experience?
4. How much do you think your French will improve?
5. What kind of living arrangements do you have, and how did you choose them?

In the middle of the study abroad program

1. What do you like or not like about studying in Paris?
2. What is it like living with Parisians?
3. Do you think you would like to live here? Why or why not?
4. Do you feel like you are changing as a person or as a student because of this experience?
5. Do you feel like your French is improving, and in what way?
6. How is it going, in general?

At the end of the study abroad program

1. What did you like or not like about studying in Paris?
2. What was it like living with Parisians?
3. Do you think you would like to live there? Why or why not?
4. Do you feel like you changed as a person or as a student because of this experience?
5. Do you feel like your French has improved, and in what way?
6. How did it go, in general?

APPENDIX E. MODIFIED STUDY ABROAD MOTIVATION AND CONTACT QUESTIONNAIRE

AMTB: Ideal L2 Self (before and after study abroad)

	1 (strongly disagree) → 6 (strongly agree)
I can imagine myself living abroad and having a discussion in French.	**1 2 3 4 5 6**
I can imagine myself living abroad and using French effectively for communicating with the locals.	**1 2 3 4 5 6**
I can imagine a situation where I am speaking French with foreigners.	**1 2 3 4 5 6**
I can imagine myself speaking French with international friends and colleagues.	**1 2 3 4 5 6**
I imagine myself as someone who is able to speak French.	**1 2 3 4 5 6**
I can imagine myself speaking French as if I were a native speaker of French.	**1 2 3 4 5 6**
Whenever I think of my future career, I imagine myself using French.	**1 2 3 4 5 6**
The things I want to do in the future require me to use French.	**1 2 3 4 5 6**
I can imagine myself studying in a university where all my courses are taught in French.	**1 2 3 4 5 6**
I can imagine myself writing French emails fluently.	**1 2 3 4 5 6**

AMTB: Attitudes to L2 community (before and after study abroad)

	1 (not at all) → 6 (very much) **1 (strongly disagree) → 6 (strongly agree)**
French/Parisian people are very sociable, warm-hearted, and creative people.	**1 2 3 4 5 6**
I would like to know more French people.	**1 2 3 4 5 6**
The more I get to know French/Parisian people, the more I want to be fluent in their language.	**1 2 3 4 5 6**
French/Parisian people are patient when foreigners make mistakes speaking French.	**1 2 3 4 5 6**
French/Parisian people are friendly and easy to get along with.	**1 2 3 4 5 6**
French/Parisian people are considerate of the feelings of others.	**1 2 3 4 5 6**

I have a favorable attitude toward French/Parisian people.	**1**	**2**	**3**	**4**	**5**	**6**
The French/Parisian people are hospitable and welcoming.	**1**	**2**	**3**	**4**	**5**	**6**
French/Parisian people are cheerful, agreeable, and good-humored.	**1**	**2**	**3**	**4**	**5**	**6**
French/Parisian people are very polite.	**1**	**2**	**3**	**4**	**5**	**6**
French/Parisian people are very generous.	**1**	**2**	**3**	**4**	**5**	**6**
For the most part, French/Parisian people are sincere and honest.	**1**	**2**	**3**	**4**	**5**	**6**
Do you like to travel to French-speaking countries/regions?	**1**	**2**	**3**	**4**	**5**	**6**
Do you like the people who live in French-speaking countries/regions?	**1**	**2**	**3**	**4**	**5**	**6**
Would you like to know more about people from French-speaking countries/regions?	**1**	**2**	**3**	**4**	**5**	**6**
How important do you think it is to learn French in order to learn more about the culture and art of its speakers?	**1**	**2**	**3**	**4**	**5**	**6**
How much would you like to become similar to the people who speak French?	**1**	**2**	**3**	**4**	**5**	**6**

Possible Selves Questionnaire (before and after study abroad)

		Describes me now	***Describes possible future***	***Is this a desired or undesirable future? (1=undesired, 5=desired)***	***How likely is this in the future? (1= not likely, 5= very likely)***	***How often have you thought about this future? (1= never, 5= a lot)***
1.	Understand the views of French people	Yes | No	Yes | No			
2.	Think like French people	Yes | No	Yes | No			
5.	Understand views of Parisian people	Yes | No	Yes | No			
6.	Think like Parisian people	Yes | No	Yes | No			
9.	Feel at ease with French people	Yes | No	Yes | No			

10.	Friendships with French people	Yes | No	Yes | No			
11.	Feel at ease with people who speak French	Yes | No	Yes | No			
12.	Friendships with people who speak French	Yes | No	Yes | No			
13.	Feel at ease with Parisian people	Yes | No	Yes | No			
14.	Friendships with Parisian people	Yes | No	Yes | No			
19.	Act like French people	Yes | No	Yes | No			
20.	Meet and converse with French people	Yes | No	Yes | No			
21.	Act like Parisian people	Yes | No	Yes | No			
22.	Meet and converse with Parisian people	Yes | No	Yes | No			

Language Contact Profile

Pretest: Prior to study abroad semester

Part A. General Information

1. **Gender:** ☐ F ☐ M
2. **Date of Birth:** _____
3. **Place of Birth**:_____
4. **Do you have vision or hearing problems**? _____
5. **What year are you in school?** (circle one)

Freshman Sophomore Junior Senior Graduate Student Other

6. What is your major? _____

Part B. Known Languages and Uses

1. **Native language:** _____ **Dialect:** _____
2. **Mother's native language:** _____**Mother's place of origin:** _____
3. **Father's native language:** _____**Father's place of origin:** _____

4. **Partner's native language:** _____ **Partner's place of origin:** _____
5. **Language(s) spoken at home during childhood:** _____

   If more than one, with whom did you speak each language?

   _____
6. **Language(s) spoken at home during the first five years of your life:** _____
7. **Place of residence during the first five years of your life:** _____
8. **Language(s) of instruction during elementary school (content courses):** _____
9. **Place of residence from 6 to 11 years old:** _____
10. **Language(s) of instruction during middle and high school (content courses):** _____
11. **Place of residence from 12 to 17 years old**: _____
12. **Have you visited or lived in other places where they speak a different language?**

Where, when, and for how long? _____

_____

13. **Have you ever traveled to a French speaking location for the purpose of language study?**

Where, when, and for how long? _____

_____

14. **Have you studied French in school in the past at each of the levels listed below? If yes, for how long? (Check one)**

a. Elementary school: ☐No ☐Yes: ☐less than 1 year ☐1–2 years ☐more than 2 years

b. Junior high/middle school: ☐No ☐Yes: ☐less than 1 year ☐1–2 years ☐more than 2 years

c. High school: ☐No ☐Yes: ☐less than 1 year ☐1–2 years ☐more than 2 years

d. University/college: ☐No ☐Yes: ☐less than 1 year ☐1–2 years ☐more than 2 years

e. Other (Please specify): _____

☐No ☐Yes: ☐less than 1 year ☐1–2 years ☐more than 2 years

15. Other language(s) that you know (besides your native language), proficiency levels, and years of formal instruction in a school setting					
Language	Reading	Writing	Speaking	Listening	Years of formal instruction
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	

16. Please list all languages you know *in order of dominance*.				
Most dominant → Least dominant				

17. Please list all languages you know *in the order in which you acquired them* (native language first)				
Language acquired first → Language acquired last				

17. Please list what percentage of the time you are *on average* exposed to each language you know. (Your percentages should add up to 100%)				
Language:	Language:	Language:	Language:	Language:
Percentage:	Percentage:	Percentage:	Percentage:	Percentage:

Posttest- after study abroad semester

Please indicate the French language courses you took this semester:

Course name Course number Brief description

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

1. Which situation best describes your living arrangements in France during the past semester? (check one)

a. ☐ I lived in the home of a French-speaking family.

i. List the members of the family e.g., mother, father, one 4-year-old daughter, one 13-year-old son: _____

ii. Where were your host parents from? _____

iii. Did they speak English? Circle one: Yes No

iv. Were there other nonnative speakers of French living with your host family? Circle one: Yes No

b. ☐ I lived in a student dormitory or residence hall.

i. ☐ I had a private room

ii. ☐ I had a roommate who was a native or fluent French speaker.

iii. ☐ I lived with others who are NOT native or fluent French speakers.

c. ☐ I lived alone in a room or an apartment

d. ☐ I lived in a room or an apartment with native or fluent French speakers

e. ☐ I lived in a room or an apartment with others who are NOT native or fluent French speakers

f. ☐ Other. Please specify: _____

For the following items, please specify:

i. How many *days per week* you typically used French in the situation indicated, and

ii. on average how many *hours per day* you did so

Circle the appropriate numbers

1. On average, how much time did you spend speaking or listening, *in French*, outside of class during this semester?

Typically, how many *days per week*? 0 1 2 3 4 5 6 7

On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5

2. How often did you read or write *in French* outside the classroom (not for homework, including social media)?

Typically, how many *days per week*? 0 1 2 3 4 5 6 7

On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5

3. On average, how much time did you spend speaking or listening, *in English*, outside of class during this semester?

Typically, how many *days per week*? 0 1 2 3 4 5 6 7

On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5

4. How often did you read or write *in English* outside the classroom (not for homework, including social media)?

Typically, how many *days per week*? 0 1 2 3 4 5 6 7

On those days, typically how many *hours per day*? 0–1 1–2 2–3 3–4 4–5 more than 5

5. Please list all languages you know in order of dominance.				
Most dominant → Least dominant				

6. Other language(s) that you know (besides your native language), proficiency levels, and years of formal instruction in a school setting					
Language	Reading	Writing	Speaking	Listening	Years of formal instruction
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	
	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	

	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	☐ Beginner ☐ Intermediate ☐ Advanced ☐ Near-native	

7. Please list what percentage of the time during your semester abroad you were *on average* exposed to each language you know. (Your percentages should add up to 100%)				
Language:	Language:	Language:	Language:	Language:
Percentage:	Percentage:	Percentage:	Percentage:	Percentage:

Additional questions after study abroad

1. What other things did you do in French while in Paris? _____
2. How often did you travel outside Paris or outside France? _____
3. What could have helped you use more French? _____

REFERENCES

Académie française. (2017). Les missions | Académie française. Retrieved February 13, 2017, from http://www.academie-francaise.fr/linstitution/les-missions

Agha, A. (2005). Voice, Footing, Enregisterment. *Journal of Linguistic Anthropology*, *15*(1), 38–59.

Alkire, T., & Rosen, C. (2010). *Romance Languages: A Historical Introduction*. New York: Cambridge University Press.

American Council on the Teaching of Foreign Languages. (2012). ACTFL Proficiency Guidelines 2012. Retrieved from www.actfl.org

Armstrong, N., & Boughton, Z. (2009). Perception and production in French dialect leveling. In K. Beeching, N. Armstrong, & F. Gadet (Eds.), *Sociolinguistic Variation in Contemporary French* (pp. 9–24). Philadelphia: John Benjamins Publishing Company.

Armstrong, N., & Pooley, T. (2010). *Social and Linguistic Change in European French*. New York: Palgrave Macmillan.

Badstubner, T., & Ecke, P. (2009). Student Expectations, Motivations, Target Language Use, and Perceived Learning Progress in a Summer Study Abroad Program in Germany. *Unterrichtspraxis*, *42*(1), 41–49.

BBC. (2005, November 18). France "needs ethnic statistics." *BBC News*. Retrieved from http://news.bbc.co.uk/2/hi/europe/4451038.stm

Blondeau, H., Nagy, N., Sankoff, G., & Thibault, P. (2002). La couleur locale du français L2 des anglo-montréalais. *Acquisition et Interaction En Langue Étrangère*, *17*, 73–100.

Bongiovanni, S., Long, A. Y., Solon, M., & Willis, E. W. (2015). The effect of short-term study abroad on second language Spanish phonetic development. *Studies in Hispanic and Lusophone Linguistics*, *8*(2), 243–283.

Bonnefoy, G. (2016, September 20). Quand Sarkozy brandit le mythe tenace de nos ancêtres gaulois. *l'Express*. Retrieved from http://www.lexpress.fr/actualite/politique/lr/quand-sarkozy-brandit-le-mythe-tenace-de-nos-ancetres-gaulois_1832381.html

Carignan, C. (2013). When Nasal Is More Than Nasal: The Oral Articulation of Nasal Vowels in Two Dialects of French. Dissertation. Retrieved from https://www.ideals.illinois.edu/handle/2142/45317

Carr, E. S. (2010). *Scripting Addiction: The Politics of Therapeutic Talk and American Sobriety*. Princeton: Princeton University Press.

Chrisafis, A. (2015, January 12). Charlie Hebdo attackers: born, raised and radicalised in Paris. *The Guardian*. Retrieved from https://www.theguardian.com/world/2015/jan/12/-sp-charlie-hebdo-attackers-kids-france-radicalised-paris

Council of Europe. (2001). Common European Framework of Reference for Languages: Learning, teaching, assessment. Cambridge University Press/Council of Europe. Retrieved from http://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and Conducting Mixed Methods Research* (2nd ed.). Thousand Oaks, CA: SAGE Publications.

Csízer, K., & Dörnyei, Z. (2005). Language Learners' Motivational Profiles and Their Motivated Learning Behavior. *Language Learning*, *55*(4), 613–659.

Cubillos, J., Chieffo, L., & Fan, C. (2008). The impact of short-term study abroad programs on L2 listening comprehension skills. *Foreign Language Annals*, *41*(1), 157–185.

Di Silvio, F., Donovan, A., & Malone, M. E. (2014). The Effect of Study Abroad Homestay Placements: Participant Perspectives and Oral Proficiency Gains. *Foreign Language Annals*, *47*(1), 168–188.

Diaz-Campos, M. (2004). Context of learning in the acquisition of Spanish second language phonology. *Studies in Second Language Acquisition*, *26*, 249–273.

Dörnyei, Z. (2009). Chapter 2. The L2 Motivational Self System. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, Language Identity and the L2 Self* (pp. 9–42). Tonawanda, NY: Multilingual Matters.

Dörnyei, Z., & Ushioda, E. (Eds.). (2009). *Motivation, Language Identity and the L2 Self*. Tonawanda, NY: Multilingual Matters.

Dörnyei, Z., & Ushioda, E. (2011). *Teaching and Researching Motivation* (2nd Ed.). Harlow, UK: Pearson Education Limited.

Fagyal, Z., Kibbee, D., & Jenkins, F. (2006). *French: A Linguistic Introduction*. New York: Cambridge University Press.

Fonagy, I. (1989). Le francais change de visage? *Revue Romane*, *24*(2), 225–254.

Freed, B. F., Dewey, D. P., Segalowitz, N., & Halter, R. (2004). The Language Contact Profile. *Studies in Second Language Acquisition*, *26*, 349–356.

Fulcher, G. (2010). *Practical Language Testing*. London: Hodder Education.

Gaillard, S. (2014a). Test Specification for the Elicited Imitation Task as a new component for French placement test in institutional and research settings, Version 6.2.

Gaillard, S. (2014b). The Elicited Imitation Task as a Method for French Proficiency Assessment in Institutional and Research Settings. PhD dissertation.

Gaillard, S., & Tremblay, A. (2016). Linguistic Proficiency Assessment in Second Language Acquisition Research: The Elicited Imitation Task. *Language Learning*, *66*(2), 419–447.

Gal, S. (2012). Chapter 2. Sociolinguistic Regimes and the Management of "Diversity." In A. Duchêne & M. Heller (Eds.), *Language in Late Capitalism: Pride and Profit* (pp. 22–41). New York: Routledge.

Gambi, C., & Pickering, M. J. (2013). Prediction and imitation in speech. *Frontiers in Psychology*, *4*, 1–9.

Gardner, R. C. (1985a). *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London: Edward Arnold.

Gardner, R. C. (1985b). The Attitude/Motivation Test Battery: Technical Report. Retrieved from http://publish.uwo.ca/~gardner/docs/AMTBmanual.pdf

Gardner, R. C. (2005, May). *Integrative motivation and second language acquisition*. Joint Plenary Talk presented at the Canadian Association of Applied Linguistics/Canadian Linguistics Association, London, Ontario, Canada.

Garrod, S., & Pickering, M. J. (2009). Joint Action, Interactive Alignment, and Dialog. *Topics in Cognitive Science 1*, 292–304.

Goffman, E. (1959). *The Presentation of Self in Everyday Life*. New York: Doubleday.

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a Conceptual Framework for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis*, *11*(3), 255–274.

Grosjean, F. (1996). Gating. *Language and Cognitive Processes*, *11*(6), 597–604.

Grosjean, F., & Frauenfelder, U. (1996). Guide to Spoken Word Recognition Paradigms: Introduction. *Language and Cognitive Processes*, *11*(6), 553–558.

Hernandez, T. A. (2010a). Promoting Speaking Proficiency through Motivation and Interaction: The Study Abroad and Classroom Learning Contexts. *Foreign Language Annals*, *43*(4), 650–670.

Hernandez, T. A. (2010b). The Relationship Among Motivation, Interaction, and the Development of Second Language Oral Proficiency in a Study Abroad Context. *The Modern Language Journal*, *94*(4), 600–617.

Howard, M., Mougeon, R., & Dewaele, J.-M. (2013). Chapter 17. Sociolinguistics and Second Language Acquisition. In R. Bayley, R. Cameron, & C. Lucas (Eds.), *The Oxford Handbook of Sociolinguistics* (pp. 340–359). New York: Oxford University Press.

Hulstijn, J. H. (2011). Language Proficiency in Native and Nonnative Speakers: An Agenda for Research and Suggestions for Second-Language Assessment. *Language Assessment Quarterly*, *8*, 229–249.

INSEE. (2017, January 5). Population at the census- 2014. Retrieved February 10, 2017, from https://www.bdm.insee.fr/bdm2/affichageSeries?idbank=000067540&bouton=OK&codeGroupe=27

Institute of International Education. (2015). Open Doors Report: Fast Facts 2015. Retrieved from http://www.iie.org/~/media/Files/Corporate/Open-Doors/Fast-Facts/Fast-Facts-2015.pdf?la=en

Isabelli-Garcia, C. (2006). Study Abroad Social Networks, Motivation and Attitudes: Implications for Second Language Acquisition. In M. A. DuFon & E. Churchill (Eds.), *Language Learners in Study Abroad Contexts* (pp. 231–258). Clevedon, UK: Multilingual Matters.

Kinginger, C. (2010). American students abroad: Negotiation of difference? *Language Teaching*, *43*(2), 216–227.

Knouse, S. (2013). The Acquisition of Dialectal Phonemes in a Study Abroad Context: The Case of the Castilian Theta. *Foreign Language Annals*, *45*(4), 512–542.

Koven, M. (2015). Chapter 20. Narrative and Cultural Identities: Performing and Aligning with Figures of Personhood. In A. de Fina & G. Alexandra (Eds.), *Handbook of Narrative Analysis* (pp. 388–406).

Le Monde. (2009, November 12). Le débat sur l'identité nationale est "nécessaire" selon Sarkozy. *Le Monde*. Retrieved from http://www.lemonde.fr/politique/article/2009/11/12/le-debat-sur-l-identite-nationale-est-necessaire-selon-sarkozy_1266493_823448.html

Le Monde. (2015, January 20). Manuel Valls évoque « un apartheid territorial, social, ethnique » en France. *Le Monde*. Retrieved from http://www.lemonde.fr/politique/article/2015/01/20/pour-manuel-valls-il-existe-un-apartheid-territorial-social-ethnique-en-france_4559714_823448.html

Llanes, A., & Muñoz, C. (2009). A short stay abroad: Does it make a difference? *System*, *37*(3), 353–365.

Lodge, R. A. (1993). *French: from Dialect to Standard*. New York: Routledge.

Loudermilk, B. C. (2013). Chapter 7. Psycholinguistic Approaches. In R. Bayley, R. Cameron, & C. Lucas (Eds.), *The Oxford Handbook of Sociolinguistics* (pp. 132–151). New York: Oxford University Press.

Luthi, J., & Vorwerg, C. (2014). Does sociolinguistic distance inhibit syntactic alignment? Evidence from syntactic priming between and within varieties of German. In *Proceedings of AMLaP XX* (p. 36). Edinburgh, Scotland. Retrieved from http://www.ppls.ed.ac.uk/AMLaP/documents/programme.pdf

MacIntyre, P. D., Mackinnon, S. P., & Clément, R. (2009). Chapter 10. Toward the Development of a Scale to Assess Possible Selves as a Source of Language Learning Motivation. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, Language Identity and the L2 Self* (pp. 172–192). Tonawanda, NY: Multilingual Matters.

Magnan, S. S., & Back, M. (2007). Social Interaction and Linguistics Gain During Study Abroad. *Foreign Language Annals*, *40*(1), 43–61.

Malécot, A., & Lindsay, P. (1976). The Neutralization of /ɛ̃/-/œ̃/ in French. *Phonetica*, *33*, 45–61.

Marian, V., Blumenfeld, H. K., & Kaushanskaya, M. (2007). The Language Experience and Proficiency Questionnaire (LEAP-Q): Assessing Language Profiles in Bilinguals and Multilinguals. *Journal of Speech, Language, and Hearing Research*, *50*, 940–967.

Martinet, A. (1952). Function, Structure, and Sound Change. *WORD*, *8*(1), 1–32.

Martinsen, R. A., & Alvord, S. M. (2012). On the relationship between L2 pronunciation and culture. *Spanish in Context*, *9*(3), 443–465.

Martinsen, R. A., Alvord, S. M., & Tanner, J. (2014). Perceived Foreign Accent: Extended Stays Abroad, Level of Instruction, and Motivation. *Foreign Language Annals*, *47*(1), 66–78.

McAll, C. (2013). Chapter 3. Doers and Makers: The Interwoven Stories of Sociology and the Study of Language. In R. Bayley, R. Cameron, & C. Lucas (Eds.), *The Oxford Handbook of Sociolinguistics* (pp. 48–66). New York: Oxford University Press.

Mendoza-Denton, N. (2008). *Homegirls: Language and Cultural Practice among Latina Youth Gangs*. Malden, MA: Blackwell.

Morin, Y.-C. (2000). Le francais de reference et les normes de prononciation. *CILL*, *26*(1–4), 91–135.

Morin, Y.-C. (2002). The Phonological Status of Nasal Vowels in Sixteenth-century French. In R. Sampson & W. Ayres-Bennet (Eds.), *Interpreting the History of French: A Festschift for Peter Rickard* (pp. 95–129). New York: Rodopi.

Nicholas, J., Fagyal, Z., Carignan, C., & Shosted, R. (in preparation). Hear me out! The role of age and dialect experience on the perception of nasal vowels in two dialects of French.

Nicholas, J., Fagyal, Z., Carignan, C., & Shosted, R. (2014a). Intra- and inter-dialectal differences in the perception of French nasal vowels in Québec. Presented at the 44th Linguistic Symposium on Romance Languages, London, Ontario.

Nicholas, J., Fagyal, Z., Carignan, C., & Shosted, R. (2014b, June). *Perception of French nasal vowels in Saguenay-Lac-Saint-Jean, Québec: the role of age and dialect experience*. Presented at the Association for French Language Studies, Canterbury, UK.

Pardo, J. S. (2006). On phonetic convergence during conversational interaction. *Journal of the Acoustical Society of America*, *119*(4), 2382–2393.

Pecnard, J. (2017, March 17). "Racisme anti-Français", une expression passée de Le Pen à Fillon. *l'Express*. Retrieved from http://www.lexpress.fr/actualite/politique/elections/racisme-anti-francais-une-expression-passee-de-le-pen-a-fillon_1890394.html

Pickering, M. J., & Garrod, S. (2004). Toward a mechanistic psychology of dialogue. *Behavioral and Brain Sciences*, *27*(2), 169–226.

Ringer-Hilfinger, K. (2012). Learner Acquistion of Dialect Variation in a Study Abroad Context: The Case of the Spanish [Theta]. *Foreign Language Annals*, *45*(3), 430–446.

Sampson, R. (1999). *Nasal Vowel Evolution in Romance*. Oxford: Oxford University Press.

Sarandi, H. (2015). Reexamining elicited imitation as a measure of implicit grammatical knowledge and beyond...? *Language Testing*, *32*(4), 485–501.

Segalowitz, N., & Freed, B. F. (2004). Context, Contact, and Cognition in Oral Fluency Acquisition: Learning Spanish in At Home and Study Abroad Contexts. *Studies in Second Language Acquisition*, *26*, 173–199.

Spada, N., Shiu, J. L.-J., & Tomita, Y. (2015). Validating an Elicited Imitation Task as a Measure of Implicit Knowledge: Comparisons With Other Validation Studies. *Language Learning*, *65*(3), 723–751.

Stille, A. (2014, July 11). Can the French Talk About Race? *The New Yorker*. Retrieved from http://www.newyorker.com/news/news-desk/can-the-french-talk-about-race

Taguchi, T., Magid, M., & Papi, M. (2009). Chapter 4. The L2 Motivational Self System among Japanese, Chinese, and Iranian Learners of English: A Comparative Study. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, Language Identity and the L2 Self* (pp. 66–97). Tonawanda, NY: Multilingual Matters.

Teddlie, C., & Yu, F. (2007). Mixed Methods Sampling: A Typology With Examples. *Journal of Mixed Methods Research*, *1*(1), 77–100.

The Economist. (2015, April 4). Ethnic minorities in France: An edgy inquiry. *The Economist*. Retrieved from http://www.economist.com/news/europe/21647638-taboo-studying-immigrant-families-performance-fraying-edgy-inquiry

Tremblay, A. (2011). Proficiency assessment standards in second language acquisition research: "Clozing" the Gap. *Studies in Second Language Acquisition*, *33*, 339–372.

Tremblay, A., & Garrison, M. D. (2010). Cloze tests: A tool for proficiency assessment in research on L2 French. In M. T. Prior, Y. Watanabe, & S.-K. Lee (Eds.), *Selected Proceedings of the Second Language Research Forum 2008* (pp. 73–88). Somerville, MA: Cascadilla Press.

Trofimovich, P. (2013). Interactive alignment: A teaching-friendly view of second language pronunciation learning. *Language Teaching*, 1–12.

Ushioda, E., & Dörnyei, Z. (2009). Chapter 1. Motivation, Language Identities, and the L2 Self: A Theoretical Overview. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, Language Identity and the L2 Self* (pp. 1–8). Tonawanda, NY: Multilingual Matters.

Van Houten, J. (2015). President's Message. *Foreign Language Annals*, *48*(4), 535–537.

Van Moere, A. (2012). A psycholinguistic approach to oral language assessment. *Language Testing*, 1–20.

Wortham, S. (2001). *Narratives in Action*. New York: Teachers' College Press.

Yan, X., Maeda, Y., Lv, J., & Ginther, A. (2016). Elicited imitation as a measure of second language proficiency: A narrative review and meta-analysis. *Language Testing*, *33*(4), 497–528.